

MANAGING THE QUALITY OF EDUCATION IN ZIMBABWE:
THE INTERNAL EFFICIENCY OF RURAL DAY SECONDARY SCHOOLS

by

NDABAZINHLE J NCUBE

submitted in accordance with the requirements
for the degree of

DOCTOR OF EDUCATION

in the subject

EDUCATION MANAGEMENT

at the

UNIVERSITY OF SOUTH AFRICA

PROMOTER: PROF GM STEYN

NOVEMBER 2004

- a. I declare that: ***Managing the quality of education in Zimbabwe: The internal efficiency of Rural Day Secondary Schools***, is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references".

Summary in English, for publication by ProQuest Information and Learning:

i. Approved title of theses: ***Managing the quality of education in Zimbabwe: The internal efficiency of Rural Day Secondary Schools***.

ii. By: **NJ Ncube**

iii. Degree: **Doctor of Education**

iv. Subject: **Education Management**

v. Promoter: **Professor GM Steyn**

v. Summary.

The study sought to analyse how the management of the quality of education of Rural Day Secondary Schools has been affected by the internal efficiency of the school system. The research questions were derived from literature review on the quality of education, and the establishment of Rural Day Secondary Schools. Both quantitative and qualitative techniques were used to collect data for analysis. The study measured the internal efficiency of selected Rural Day Secondary Schools using such indicators as survival rates; dropout rates; repetition rates, and pass rates. It also analysed the views of school managers and school heads on factors affecting the quality of education in Rural Day Secondary Schools, and strategies that can be used to improve the quality of education thereof.

The study found out that the internal efficiency of Rural Day Secondary Schools was low. At least 30% of students entering Rural Day Secondary Schools were overage; and the overall survival rate from Form 1 to Form 4 was 57.4% and it was higher for female students than for male students. The chief drivers of school dropouts were inability to pay school and examination fees (the parents are economically vulnerable); long distances walked by students to school; pregnancy and the effects of HIV and AIDS. At least 4.1% of enrolled students repeated classes and the majority of repeaters were those who returned to repeat after failing the "O" level examinations. More female students than male students repeated classes. The average "O" level examination pass rate was 9.8% and pass rates were higher for male students than for female students. The reasons for the low pass rates are varied, and include the calibre of students enrolled in Rural Day Secondary Schools; lack of resources; low teacher morale; long distances walked by students to school, and the curriculum which does not address the needs of rural students.

Of the programmes that were introduced to improve the quality of education BSP (Z) emerged to be the most effective while, the Quality Assurance Division is the least

effective. ZIMSEC has improved access to “O” level examinations and the relevance of the examination questions, but is fraught with mismanagement, while the Clients’ Charter has not truly taken off due to inadequate training. SDCs have improved infrastructure and the supply of resources in the schools, but lack basic understanding of government policy on education.

The study recommended that more funding be allocated to Rural Day Secondary Schools to boost resources and curtail dropouts. Additional funding would also assist in the completion of outstanding infrastructure like libraries and laboratories. It was also recommended that low-cost boarding facilities be introduced in Rural Day Secondary Schools to deal with the problem of long distances walked by students. There is also need to re-engineer the curriculum and make more responsive to the plight of rural students. Training is needed for SDCs, and for all stakeholders on the Clients’ Charter. It was further recommended that BSP (Z) should try to reach out to remote schools; ZIMSEC should improve on examinations management, and the Quality Assurance Division should be revamped to carry out effective teacher supervision.

b. Title page:

CURRICULUM VITAE

NAME: Ndabazinhle Ncube
DATE OF BIRTH: 6 August 1962
PLACE OF BIRTH: Bulawayo: Zimbabwe
ADDRESS (home): Box 864, Bulawayo, Zimbabwe
(business): Box 3550, Bulawayo, Zimbabwe
PHONE(home): 263-9-286588
(business): 263-9-884056

QUALIFICATIONS

Academic

Year	Institution	Qualification
1979	Mzingwane High School	“O” level
1984	Private study	“A” level

Professional

Year	Institution	Qualification
1983	United College of Education	Certificate in Education
1986	Gweru Teachers’ College	Secondary Teachers’ Certificate
1989	University of Zimbabwe	Bachelor of Education
1993	University of Zimbabwe	Masters in Educational Administration
2003	Zimbabwe Open University	Masters in Business Administration

Other

Year	Institution	Qualification
1987	ZIFA (Affiliated to FIFA)	Soccer Referees Certificate
1996	University of Zimbabwe	Certificate in Counseling Skills
1998	Bulawayo Poly-technical College	Computer Application in Educational Research
2000	BS&T	Certificate in Finance for Non- Finance Managers
2001	IIEP- UNESCO	Certificate in Institutional Management in Higher Education

EMPLOYMENT HISTORY

Period	Institution	Post	Responsibilities
2002 to date	Zimbabwe Open University	Regional Director Bulwayo	1.Supervision of lecturers 2.Lecturing 3.Supervising research 4.Budget management 5.Examinations management
1999 to 2001	Zimbabwe Open University	Regional Director Matabeleland South	1.Supervision of lecturers 2.Lecturing 3.Supervision of research 4.Budget management 5.Examinations management
1997 to 1998	Zimbabwe Open University	Lecturer	1.Lecturing 2.Setting and marking examinations and assignments 3.Supervising research 4.Conducting research
1996	University of Zimbabwe	Lecturer	1.Lecturing 2.Setting and marking examinations and assignments 3.Supervising research 4.Conducting research
1994 to 1995	Hillside Teachers' College	Lecturer	1.Lecturing 2.Setting and marking examinations and assignments 3.Supervising students on teaching practice
1988 to 1993	Stanmore Secondary School	School head	1.Teaching "O" level mathematics 2.Supervising teachers 3.Planning and supervising school development projects 4.School budgeting and financial management
1984 to 1987	Mzimuni Secondary School	Teacher	1.Teaching Mathematics 2.Coaching soccer

ATTACHMENTS

Year	Institution	Activities
1999	Pittsburgh University	1. Carrying out research in Measurement and Evaluation in Education, and Distance and Open Learning.
2004 to 2005	North West University	1. Teaching at Honours, and Masters level. 3. Internal examiner for both Honours and Masters levels in the Department of Foundations of Education.

RESEARCH CONDUCTED

1. Financial management of Rural District Council Secondary Schools (1993).
2. Needs assessment of District Aids Action Committees (2001).
3. Challenges of implementing strategic management in teacher training colleges (2003).
4. Assessment of the internal efficiency of Rural Day Secondary Schools in Zimbabwe (2004).

PUBLICATIONS

1. 2002. *Dissertation guidelines for Masters in Educational Administration*. Harare: Zimbabwe Open University.
2. 2003. *Research methods and statistics for Masters in Educational Administration*. Harare: Zimbabwe Open University.

Abstract

The study analysed how the management of the quality of education of Rural Day Secondary Schools has been affected by the internal efficiency of the school system. Both quantitative and qualitative techniques were used in the study. The study measured the internal efficiency of selected Rural Day Secondary Schools, and analysed the views of school managers and school heads on the quality of education of Rural Day Secondary Schools, and strategies that can be used to improve the quality of education thereof.

The study found out that the internal efficiency of Rural Day Secondary Schools was low. At least 30% of students entering Rural Day Secondary Schools were overage; and the overall survival rate was 57.4% Dropouts were mainly caused by inability to pay school and examination fees and long distances walked by students to school. Students repeated classes mainly at Form 4. The average “O” level examination pass rate was 9.8%. The reasons for the low pass rates include the calibre of students enrolled; lack of resources; low teacher morale; long distances walked by students to school, and an unsuitable curriculum.

BSP (Z) has been the most effective programme in addressing the quality of education, while the Quality Assurance Division is the least effective. ZIMSEC has improved access to “O” level examinations and the relevance of the examination questions, but is fraught with mismanagement, while the Clients’ Charter has not been fully implemented due to inadequate training. SDCs have improved the supply of resources in the schools, but lack basic understanding of education policies.

The study recommended that more funding be allocated to Rural Day Secondary Schools to boost resources and curtail dropouts, and that low-cost boarding facilities be introduced to deal with the problem of long distances walked by students. There is also a need to re-engineer the curriculum and make it more responsive to the plight of rural students. Training is needed for SDCs, on the Clients’ Charter. It was further recommended that BSP (Z) should try to reach out to remote schools; ZIMSEC should improve examinations management, and the Quality Assurance Division should be revamped to carry out effective teacher supervision.

Acknowledgements

I would like to express my sincere indebtedness to the following people, who through their various contributions, made possible the completion of this thesis. First I would like to acknowledge the expert and professional guidance I got from Professor GM Steyn, my promoter. I would also want to thank Professor EM Lemmer of UNISA for editing the thesis. Many thanks also go to the Ministry of Education, Sport and Culture for allowing me to carry out the study, in particular the Provincial Education Director for Matabeleland South region (Mr SH Khumalo), and his staff for facilitating easy access to the research data. I also take the opportunity to thank school managers and school heads, who participated in the focus groups and personal interviews, respectively. Finally, many thanks go to Mrs Josephine Ncube, for assisting with the typing of the thesis.

TABLE OF CONTENTS

Content	Page
Abstract.....	i
Acknowledgements.....	ii
Table of contents.....	iii
List of abbreviations.....	xi
List of tables.....	xii
List of figures.....	xiv
Chapter 1: The problem and its setting.....	1
1.1 Background to the study	1
1.2 Statement of the problem	7
1.3 Motivation for the study.....	8
1.3.1 Importance of the study	8
1.3.2 Contribution of the study	9
1.3.3 Expected results	9
1.4 Limitations of the study	9
1.5 Demarcation of the study	9
1.6 Definition of terms	10
1.7 Aim of the study	11
1.8 Research methods and design	11
1.9 Chapter division	12
1.9.1 Chapter 1: The problem and its setting.....	12
1.9.2 Chapter 2: Review of literature: Quality of education.....	12
1.9.3 Chapter 3: Review of literature: Rural Day Secondary Schools in Zimbabwe.....	13
1.9.4 Chapter 4: Research methodology and design.....	13
1.9.5 Chapter 5: Data presentation, analysis and discussion.....	13
1.9.6 Chapter 6: Summary, conclusions and recommendations.....	13

1.10 Summary	14
Chapter 2: Review of literature: Quality of education.....	15
2.1 Introduction.....	15
2.2 The origins of the quality debate	15
2.3 What is quality of education?	17
2.3.1 Customers in TQM	25
2.3.2 Leadership in TQM	27
2.3.3 Training in TQM	27
2.3.4 Strategic planning in TQM	28
2.3.5 Teacher empowerment in TQM.....	28
2.3.6 Commitment to continuous improvement.....	29
2.3.7 Examples of institutions that have applied Total Quality Management principles in education.....	30
2.4 Models of quality as applied to education.....	32
2.4.1 Quality control	32
2.4.2 Quality assurance	33
2.4.3 Creating quality communities of learners through quality management (J J Bonstingl)	35
2.4.4 Malcolm Baldrige quality criteria.....	37
2.4.5 Philip B. Crosby's zero defects approach.....	38
2.4.6 Joseph Juran's Project Management	40
2.4.7 Deming's Total Quality Management	41
2.4.8 Shewhart cycle	44
2.5 Why quality of education?	45
2.5.1 Government accountability	45
2.5.2 The quality-quantity dilemma.....	46
2.5.3 Improving access to education	47
2.5.4 Value for parents' money	47
2.5.5 Economic development	48
2.5.6 Technological pressure	49

2.5.7 Political pressure	50
2.5.8 Globalisation	50
2.5.9 Future allocation of resources	51
2.5.10 Anticipating customer needs	52
2.5.11 The four quality imperatives.....	53
2.5.11.1 The moral imperative.....	53
2.5.11.2 The professional imperative.....	53
2.5.11.3 The competitive imperative.....	53
2.5.11.4 The accountability imperative.....	54
2.6 The costs of quality	54
2.7 Indicators of quality of education.....	57
2.8 Internal efficiency of the school system.....	60
2.8.1 Transition rate	62
2.8.2 Repetition rate	63
2.8.3 Dropout rate	64
2.8.4 Survival rate	64
2.8.5 Study time per graduate	64
2.8.6 Pass rate	65
2.8.7 Wastage ratio	65
2.9 Barriers to quality of education	67
2.9.1 Household barriers.....	68
2.9.2 Policy barriers	68
2.9.3 Infrastructure barriers.. ..	69
2.9.4 Community beliefs and practices.....	70
2.9.5 Educational barriers	70
2.9.6 General conditions for failure.....	71
2.10 Quality of education initiatives in chosen countries.....	72
2.10.1 Case 1: Burundi: Providing quality education when resources are scarce: Strategies for increasing primary school effectiveness.....	72
2.10.2 Case 2: Cote d'Ivoire: Improving quality at the local level.....	73
2.10.3 Case 3: Sri Lanka: Improving the effectiveness in a plantation school:	

The case of Gonakelle School in Sri Lanka.....	74
2.10.4 Case 4: Thailand: School improvement in Thailand.....	76
2.11 Summary	77

CHAPTER 3: Review of literature on Rural Day

Secondary Schools in Zimbabwe.....	78
3.1 Introduction	78
3.2 Educational provision just before independence.....	78
3.3 Background to establishment of Rural Day Secondary Schools	80
3.4 Expansion of education provision after independence.....	82
3.5 Quality concerns in Rural Day Secondary Schools.....	84
3.5.1 Infrastructure	85
3.5.2 Student achievement.....	86
3.5.2 Accessibility of schools	87
3.5.3 The curriculum dilemma.....	88
3.6 Financial management in education in Zimbabwe.....	89
3.7 Some efforts at improving quality of education in Zimbabwe.....	90
3.7.1 The Better Schools Programme (BSP (Z))	91
3.7.1.1 School clusters under BSP (Z).....	94
3.7.1.2 The BSP (Z) resource centers.....	95
3.7.1.3 Current comprehensive structure of BSP (Z).....	96
3.7.2 The Zimbabwe School Examinations Council (ZIMSEC).....	100
3.7.2.1 The mission statement of ZIMSEC.....	101
3.7.2.2 Structure of ZIMSEC.....	102
3.7.2.3 Guarding standards at ZIMSEC.....	102
3.7.2.4 Achievements to date.....	103
3.7.2.5 Challenges at ZIMSEC.....	104
3.7.3 The Clients' Charter	105

3.7.4 School Development Committees	108
3.7.5 The Quality Assurance Division.....	109
3.7.5.1 Challenges in the Quality Assurance Division.....	114
3.7.6 The Presidential commission of inquiry into education and training.....	117
3.7 Summary	118
 Chapter 4: Research methodology and design.....	119
4.1 Introduction	119
4.2 Research questions	119
4.3 Research design	120
4.3.1 Quantitative phase	121
4.3.1.1 Sampling.....	121
4.3.1.2 Data gathering.....	122
4.3.1.3 Data analysis.....	124
4.3.1.4 Measures to ensure validity and reliability.....	124
4.3.2 Qualitative phase	125
4.3.2.1 Sampling.....	125
4.3.2.2 Data gathering.....	126
4.3.2.3 Data analysis.....	128
4.3.2.4 Trustworthiness.....	131
4.3.2.5 Ethical measures.....	132
4.4 Summary	134
 CHAPTER 5: Data presentation, analysis and discussion.....	135
5.1 Introduction.....	135
5.2 Findings from the quantitative study.....	135
5.2.1 Enrolment patterns for the selected cohorts.....	136
5.2.1.1 Enrolment by form and gender.....	136
5.2.1.2 Enrolment by age and gender.....	138
5.2.1.3 Enrolment by form and age (male).....	139

5.2.1.4 Enrolment by form and age (female).....	140
5.2.1.5 Enrolment by form, year, age and gender.....	141
5.2.2 Survival rates for different cohorts.....	147
5.2.2.1 Survival rates for the 1999 Form 1 cohort up to Form 4.....	147
5.2.2.2 Survival rates for the 2000 Form 1 cohort up to Form 4.....	148
5.2.2.3 Survival rates for the 2001 Form 1 cohort up to Form 3.....	148
5.2.2.4 Survival rates for the 1999 Form 2 cohort up to Form 4.....	149
5.2.2.5 Survival rates for the 1999 Form 3 cohort up to Form 4.....	150
5.2.2.6 Survival rates for the 2002 Form 1 cohort up to Form 2.....	150
5.2.3 Analysis of recorded dropouts.....	151
5.2.3.1 Dropouts by form, year, reason, and gender.....	151
5.2.4 Analysis of recorded repeaters.....	154
5.2.4.1 Repeaters by form, year, and gender.....	154
5.2.5 Analysis of unaccounted for students by cohort, and gender.....	158
5.2.6 Analysis of “O” level examination pass rates.....	160
5.3 Findings from the qualitative study.....	163
5.3.1 Improving the quality of education of Rural Day Secondary Schools.....	164
5.3.1.1 BSP (Z).....	165
5.3.1.2 ZIMSEC.....	174
5.3.1.3 The Quality Assurance Division.....	183
5.3.1.4 The Clients’ Charter.....	187
5.3.1.5 SDCs.....	192
5.3.2 Strategies for improving the quality of education of Rural Day Secondary Schools	197
5.3.2.1 Positive factors.....	197
5.3.2.2 Negative factors.....	205
5.4 Summary.....	221
CHAPTER 6: Summary, conclusions and recommendations	222
6.1 Introduction.....	222
6.2 Summary.....	222

6.2.1 Summary of findings from literature review	224
6.2.1.1 Findings from literature relating to the quality of education.....	224
6.2.1.2 Findings from literature relating to Rural Day Secondary Schools in Zimbabwe.....	228
6.2.2 Summary of findings from the quantitative the study.....	229
6.2.2.1 Enrolment trends.....	229
6.2.2.2 Survival rates.....	230
6.2.2.3 Dropouts.....	230
6.2.2.4 Repetition.....	230
6.2.2.5 Unaccounted for students.....	231
6.2.2.6 Pass rates.....	231
6.2.3 Summary of findings from the qualitative study.....	231
6.3 Conclusions.....	236
6.3.1 Levels of internal efficiency.....	236
6.3.2 Variations in levels of internal efficiency.....	237
6.3.3 Improving the quality of education in Rural Day Schools.....	237
6.3.4 Strategies for improving the quality of education of Rural Day Secondary Schools.....	238
6.4 Recommendations.....	239
6.4.1 Need to conscientise parents on school requirements.....	239
6.4.2 Screening of students entering Rural Day Secondary Schools.....	239
6.4.3 Keeping of accurate records of students flow.....	240
6.4.4 Increasing financial aid to Rural Day Secondary Schools	240
6.4.5 Ensuring BSP (Z) reaches out to the remote schools.....	240
6.4.6 Improvement of examination accountability and security.....	240
6.4.7 Improvement of payment of ZIMSEC markers.....	241
6.4.8 Training on the Client's Charter.....	241
6.4.9 Empowerment of the Quality Assurance Division.....	241
6.4.10 Training of SDCs.....	241
6.4.11 Introduction of low-cost boarding facilities in Rural Day Secondary Schools.....	242

6.4.12 Construction of libraries and laboratories	242
6.4.13 Curriculum re-engineering.....	242
6.4.14 Training of specialist teachers.....	242
6.4.15 Morale of rural teachers.....	243
6.5 Recommendations for further research.....	243
6.5.1 Failure to account for students who leave school prematurely	243
6.5.2 The quality of management and instructional processes.....	243
6.5.3 Comparative studies.....	244
6.5.4 Impact of Rural Day Secondary Schools.....	244
6.6 Concluding remark.....	244
References.....	246
Appendix A	255
Appendix B.....	258
Appendix C.....	259
Appendix D.....	260
Appendix E.....	263

LIST OF ABBREVIATIONS

ADEA	Association for the Development of Education in Africa
“A” level	Advanced level
BSP (Z)	Better Schools Programme (Zimbabwe)
CIE	Cambridge International Examinations
EO	Education Officer
HOD	Head of Department
HTSP	Heads Support and Training Programme
IIEP	International Institute of Educational Planning
IRDP	Integrated Rural Development Programme
NGO	Non-governmental Organisation
OECD	Organisation for Economic Cooperation and Development
“O” level	Ordinary level
SACMEQ	Southern Africa Consortium for the Monitoring of Educational Quality
SDA	School Development Association
SDC	School Development Committee
SQM	Strategic Quality Management
TQM	Total quality Management
UNICEF	United Nations Children’s Fund
ZIMSEC	Zimbabwe School Examinations Council

LIST OF TABLES

Table	Description	Page
1.1	Dropout rates from primary Grade 1 after six years	7
3.1	Number of secondary schools, students, teachers and supervisors for four selected year	83
3.2	Percentage of trained secondary school teachers by Responsible Authority, 1984	85
3.3	Contributions to recurrent expenditure for district and cluster resource centers	96
3.4	Distribution of resource centres by region	96
3.5	Growth in candidature for the years 2000 and 2001	104
3.6	National progression rates of secondary school students as at 1998	110
3.7	Sample of supervisory trends in a district in 1997	114
3.8	Supervisors for secondary schools in 1997-1998	115
3.9	Spread of secondary school supervisors by subject in 1997-1998	116
3.10	Qualifications of secondary school supervisors in 1997-1998	116
4.1	Sample description of educational units	122
5.1	Form 1 enrolment by age and gender for all years	142
5.2	Form 2 enrolment by age and gender for all years	143
5.3	Form 3 enrolment by age and gender for all years	145
5.4	Form enrolment 4 by age and gender for all years	146
5.5	Survival rates for 1999 Form 1 cohort up to Form 4	147
5.6	Survival rates for 2000 Form1 cohort up to Form 4	148
5.7	Survival rates for 2001 Form 1 cohort up to Form 3	148
5.8	Survival rates for the 1999 Form 2 cohort up to Form	149
5.9	Survival rates for 1999 Form 3 cohort up to Form 4	150
5.10	Survival rates for 2002 Form 1 cohort up to Form 2	150
5.11	Recorded dropouts by reason, gender and year	152
5.12	Repeaters by year, form and gender	155

5.13 Summary of unaccounted for students	159
5.14 (a) “O” level examination pass rates by gender and year	160
5.14 (b) Means and standard deviations of pass rates for the period under study	161
5.15 Qualifications and sex of focus groups participants	164
5.16 Qualifications and sex of school heads	164

LIST OF FIGURES

Figure	Description	Page
3.1	BSP (Z) organisational structure	99
3.2	Organisational structure of the Quality Assurance Division (a)	111
3.2	Organisational structure of the Quality Assurance Division (b)	112
5.1	Summary of enrolment by form and gender	137
5.2	Enrolment by age and gender	138
5.3	Enrolment by form and age (male)	139
5.4	Enrolment by form and age (female)	140
5.5	Distribution of recorded dropouts by form, reason and gender	154
5.6	Distribution of recorded repeaters by form	157
5.7	Distribution of repeaters by year, form and gender	158
5.8	“O” level examination pass rates for 1999 to 2003	163

CHAPTER 1: THE PROBLEM AND ITS SETTING

1.1 BACKGROUND TO THE STUDY

As a way of improving human life the Zimbabwe government, according to the Zimbabwe Education Act (Amended in 1991) proclaimed education a basic human right in 1980, and proceeded to pour heavy investments in terms of finance, human resources and material resources into the education system. The Ministry of Education Statistics Bulletin volume 2 (1995:2) says one goal of this thrust was to increase access to primary and secondary education. According to the Public Service Bulletin volume 2 (1998:24) the budget for the Ministry of Education, Sport and Culture for the financial year 1999–2000 increased by 64%. Schools must provide high quality education for this large allocation to qualify as investment. But the term quality of education means different things to different stakeholders. A number of views on quality of education are examined here.

Liston (1999:4) defines quality of education as the total effect of the features of the process, or service on its performance, or the customer's or client's perception of that performance. It is not just a feature of a finished product or service, but involves a focus on internal processes and outputs, and includes the reduction of waste and the improvement of productivity. This view of quality applied to education implies that quality cannot be measured by looking at the outputs, which are the examination results. Rather the internal efficiency of the school system, which controls for wastages in form of school dropouts, repetition rates, or wastage ratios, is a more appropriate measure of the quality of education.

Liston (1999:4) further argues that quality is related more to the relevance and value of each institution's mission, purpose and objectives, and the achievement of identified outcomes. Low levels of the school's internal efficiency would hamper the achievement of the identified educational objectives, hence this study sought to analyse the internal efficiency of the Rural Day Secondary Schools as a variable in managing the quality of

education in Zimbabwe. Quality has a lot to do with improving key processes of an organisation, such as the internal operations.

Hoy, Bayne–Jardine and Wood (2000:2) say quality is what is good for the school and its students. They quote Edward Deming as saying, “A product or service possesses quality if it helps somebody and enjoys a good and sustainable market”. If a school’s internal efficiency is low resulting in low pass rates, high dropout rates, low survival rates, then that school system is not able to help its students, nor will the students enjoy any sustainable job market. Low internal efficiency thus compromises the quality of education.

Another way of looking at the quality of education is to use the effective schools view, which advocates for the black box technique of measuring inputs and outputs. For a social service like education, this approach cannot be applied in total, as it overlooks certain immeasurable attributes of good education that cannot be read from mere pass rates. Hoy, *et al* (2000:5) refers to the 1998 Phi Delta Kappa/Gallup poll of the public’s attitudes towards public schools’ effectiveness. The percentage of students graduating from high school was rated highest with 82% while scores of students in standardised tests was ranked lowest with 50%. The public thus sees quality more to do with the total effect schooling has on the individual rather than just examination results.

The Total Quality Management (TQM) approach propounded by Edward Deming has also been extended to education. According to Davies and West-Burnham (1997:21), the following are critical features of TQM:

- Status of customers
- Emphasis of values and missions
- Management of processes
- Significance attached to the management of people

In education this would mean attending to the needs of students and society; improving all that is done at school; accurate measurement of performance, and staff developing

teachers to enhance their instructional ability. It is important that these features are well integrated to ensure a holistic view of TQM. Smit and Cronje (1997:51) say, according to Deming, TQM emphasises use of statistical control to reduce variability in the production process and ensure uniform quality and predictable quantity of output. If trends in the internal efficiency of the school system are statistically analysed, variations and wastages can be controlled for. This ability to control for the undesirable can lead to satisfaction of client needs and expectations, and continuous improvement of the education system. TQM helps to prevent mistakes, rather than identifying mistakes that would have occurred, which is quality control.

According to North Western Regional Educational Laboratory (2000:5) the application of the TQM principles to secondary education was adopted by Mt Edgecumbe High School in Sitka, Alaska and it paid dividends. The school adapted Deming's fourteen points for quality in organisations and came up with "Mt Edgecumbe High School's Modified Deming Points for Quality in Education", which are explained, below.

- Creation and maintenance of a constancy of purpose toward improvement of student services. This would ensure students take up meaningful positions in life.
- Embracing a new philosophy that spurs educational management to awaken to new challenges.
- Working to abolish grading and harmful effects of rating people, instead emphasising the entire learning process.
- Ceasing over dependence on testing, instead stressing quality performance and worthwhile learning experiences.
- Working with educational institutions from which the students came. Quality can be viewed not in isolation, but by adding on to what students bring from their primary school experiences.
- Improving constantly and forever the system of student improvement and service so as to enhance their future quality of life.
- Instituting continuous training on the job for teachers and all those who work with the school system.
- Instituting leadership by maximising use of resources.

- Creating a conducive, work atmosphere.
- Breaking down barriers between departments in the school. This can be achieved by use of teams.
- Avoiding slogans and blaming teachers and students, rather hold the entire system accountable.
- Elimination of strict standards for teachers and students, and substitute leadership and the joy of learning.
- Removing barriers that rob the students, teachers and managers of their right to pride and joy of workmanship, by changing educational management from a quantity pursuit to a quality pursuit.
- Instituting a vigorous programme of education and self-improvement for everyone.
- Getting everybody in the community to work to accomplish the transformation.

These points can in a large way be linked to the internal efficiency of a school system as they describe more of what goes on in the learning/teaching process rather than the output of the learning/ teaching process per-se.

Other approaches to quality of education include quality control; quality assurance and quality enhancement. Whichever approach is used for analysis it must be borne in mind that quality is a matter of degree rather than absoluteness as it occurs in a low-high continuum.

Grisay and Mahlck (1991:3) see quality of education as a multidimensional concept that covers such aspects as levels of pupil achievement; relevance of the knowledge and skills acquired by learners; conditions of learning; content and methods of teaching and management of the education process. They (1991:3) argue that quality of education refers to, "... the extent to which the products or results of the education provided (the knowledge, skills, and values acquired by the students) meet the standard stipulated in the system's objectives". This definition negates the view that to achieve objectives there

must be inputs, a process and then outputs. To look at the quality of outputs per-se would give an out of context picture of quality.

Grisay and Mahlck (1991:3) quote Carron and Ta Ngoc (1980) who see quality of education as being three dimensional, that is, the inputs, the process and the outputs. Carron and Ta Ngoc (1980:51) refer to the formal quality characteristics which are based on the supply of inputs, and actual quality characteristics that focus on how effectively inputs are managed, no matter how scarce they are. They argue that it is possible to convert the limited resources into a quality product through sound and efficient management. Thus the critical issue is what is actually done with the available inputs, rather than quantities of inputs. Hence this study looked at the internal efficiency of the school system to see what is done with the resources.

The above view is also held by Ross and Mahlck (1990:16) who argue that the bulk of educational work on planning has provided information on input requirements such as infrastructure; teachers and resources; but very little has been provided in terms of the learning processes and the outcomes. The internal efficiency indicators show what is going on in the process and aid decisions on improving provision of education.

Hoy, *et al* (2000:13) says, “Measures that can be used as yardsticks for quality of education are pupil grades, attendance figures, staying-on rates, exclusion rates, teacher qualifications, pupil-teacher ratios.” The bulk of these indicators constitute internal efficiency of the school system, which this study sought to analyse. This thrust is in line with Liston’s (1999:3) view that one of the three dimensions of programme performance is efficiency (the other two being appropriateness and effectiveness).

IIEP Module 2 (1989:3) points out that one indicator of the quality of education is the internal efficiency of the school cycle, which is, “...the optimum relationship between inputs and outputs”. Here the critical concern is that the maximum numbers of students who enter an education system or cycle complete it successfully within the prescribed period. Any failures and extended study period compromise efficiency. Grisay and

Mahlck (1991:5) also allude to this view when they say, “There are also some indicators which are frequently used by planners in developing countries as appropriate means of measuring quality, e.g. repetition, dropout, promotion and transition rates.” Ross and Mahlck (1990:29) say examination results are used to monitor the performance of schools. All these are indicators of the internal efficiency of the school system. Because the concept of quality is very diverse, this study focused just on this aspect of quality.

Ross and Mahlck (1990:20) observe that schools in rural districts often change their levels of achievement over a period of five years. The study attempted to show if this is true of Zimbabwean Rural Day Secondary Schools. Ross and Mahlck (1990:20) also believe that examination feedback improves quality of education and use the Kenya Certificate of Primary Education that ranks schools as an example that has yielded positive results.

Gatawa (1998:10) says:

While developing countries have done remarkably well in terms of extending education to an appreciably large percentage of their school going population, school performance, as measured by drop-out rates, examination results... has not been encouraging.

This view is shared by Bray, Clarke and Stephens (1986:61) who argue that no African country is nearing universal secondary education despite concerted efforts and heavy investments to do so, and, “...quantitative differences are reinforced by the tendency of children to drop out at each stage.” This observation is high in developing countries, among the poor and among girls due to high costs of education and neglect by authorities. The study sought to establish if this trend has prevailed in Zimbabwe. Table 1.1 shows dropout trends in some developing countries.

Table 1.1: Dropout rates from primary Grade 1 after six years

Country	Per cent	Country	Per cent
Benin	39.9	Madagascar	75.4
Botswana	16.5	Mali	50.6
Burundi	55.1	Niger	40.3
Cameroon	42.5	Rwanda	66.8
Chad	71.5	Senegal	34.0
Congo	29.2	Sudan	25.0
Gabon	49.6	Swaziland	31.0
Gambia	4.9	Tanzania	14.6
Ghana	28.2	Togo	31.3
Ivory Coast	19.8	Zaire	59.4
Kenya	22.3	Zambia	21.8
Lesotho	53.0		

Source: Adopted from Bray, Clarke and Stephens (1986:62)

Bray, *et al* (1986:83) sees high repetition rates, which are high among the low-income groups and girls as another threat to issues of internal efficiency of the school system. Pupils who repeat grades complicate enrolment forecasts, teacher supply forecasts and erode the education budget.

Finally, the measurement of the internal efficiency of the school system helps schools to account for resources invested in them on one hand. On the other it generates data that can guide decisions on accessing education, financing of education and curriculum review. These will enhance the quality of education.

1.2 STATEMENT OF THE PROBLEM

At independence in 1980, Zimbabwe opted for a massive expansion of the education system. Government; individuals and private organisations put a lot of resources into the education system. There is need therefore to determine levels of internal efficiency in the education system to ensure that the allocated resources are not being wasted. The study therefore sought to make an analysis of the internal efficiency of the Rural Day Secondary Schools, and identify strategies that can be implemented to improve their internal efficiency. The problem was formulated as: How has the management of the quality of education in Rural Day Secondary Schools been affected by the internal efficiency of the school system?

The main problem was divided into the following four specific research problems, which were identified during the literature review:

1. What are the different levels of internal efficiency for Rural Day Secondary Schools for the years 1999 to 2003?

(Indicators of internal efficiency include: survival rates; dropout rates, repetition rates and pass rates.)

2. What are the variations in levels of internal efficiency of Rural Day Secondary Schools for the years 1999 to 2003, for students of different sexes, ages and levels of schooling?

3. What are school managers' (including some senior teachers) views of the programmes that were established to improve the quality of education of Rural Day Secondary Schools?

4. What strategies do school heads think can be implemented to improve the quality of education of Rural Day Secondary Schools?

Because the study sought to describe the internal efficiency of Rural Day Secondary Schools, and the views of school managers and school heads on programmes that were established to improve the quality of education, as well as strategies for improving the quality of education of Rural Day Secondary Schools, no hypotheses were tested. Data collection was directed by the four research questions (section 1.2).

1.3 MOTIVATION FOR THE STUDY

1.3.1 Importance of the study

Investment in education in Zimbabwe (or any other developing country) occurs against a backdrop of scarce resources, and thus an insight into the internal efficiency of the school system helps employ resources to the best benefit of both the students and the nation. Internal efficiency is a critical determinant of the quality of education, thus analysing trends in internal efficiency should give some insight into the quality of educational provision in Rural Day Secondary Schools in Zimbabwe.

1.3.2 Contribution of the study

It was hoped that the study would reveal trends in the internal efficiency of Rural Day Secondary Schools in Zimbabwe as well as factors affecting it (internal efficiency), which would in turn help schools; the Ministry of Education, Sport and Culture, and other stake holders to improve educational provision and reduce wastages.

1.3.3 Expected results

The expectation was that results would reveal low internal efficiency of the Rural Day Secondary School system, and that there would be no variations by sex, age and level of schooling of the students. It was also expected that economic, social, administrative and policy factors would be viewed to account for the low internal efficiency.

1.4 LIMITATIONS OF THE STUDY

Time and financial constraints limited the sample size for the study. The study focused exclusively on Rural Day Secondary Schools, hence it may not be easy to generalise results to non-rural school situations where conditions of learning are different. Statistical data were collected for years gone by and some documents were difficult to access.

1.5 DEMARCATION OF THE STUDY

The study was confined to issues of internal efficiency in Rural Day Secondary Schools in one, out of ten educational regions. Other educational quality concerns like provision and utilisation of resources, instructional and supervisory processes were not addressed. Moreover, primary schools were not included.

1.6 DEFINITION OF TERMS

The following terms, as used in this study ought to be understood as follows:

Internal efficiency: An indicator of the school system's capacity to retain enrolled students to course completion level with minimum wastage of resources such as time, finance and labour.

School manager: A teacher in a school who holds the position of deputy head; senior master/mistress or head of department.

Rural Day Secondary School: A formal institution located in a rural place, and offering secondary education from Form 1 to Form 4.

Transition rate: Proportion of students moving from Grade 7 to Form 1 in each year.

Repetition rate: Proportion of students repeating a given level of schooling for whatever reason.

Dropout rate: Proportion of students leaving the school system before completing the four-year secondary school course.

Survival rate: Proportion of students proceeding from one level of secondary education to the next.

Pass rate: Proportion of students completing the four-year secondary school course (O' Level) with at least five subjects marked C or better, including English Language.

Wastage ratio: A global input-output relationship in terms of years taken by a cohort of students to complete the study course.

Average study time per graduate: The number of years taken by a student to complete the study course.

Cohort: A total group of students admitted into Form 1 in the same year.

1.7 AIM OF THE STUDY

The aim of the study was to enhance the management of the quality of education in Rural Day Secondary Schools in Zimbabwe through an analysis of their internal efficiency by:

- Determining such indicators as survival rates; dropout rates; repetition rates and pass rates.
- Determining variations in levels of indicators of internal efficiency for pupils of different sexes, ages and levels of schooling.
- Analysing views of school managers (including some senior teachers) on factors that affect the internal efficiency in Rural Day Secondary Schools.
- Analysing views of school heads on strategies that can be implemented to improve the internal efficiency of Rural Day Secondary Schools.

1.8 RESEARCH METHODS AND DESIGN

The study used a combination of quantitative and qualitative designs to yield comprehensive and rich data (Borland 2001:1). For the quantitative phase of the study one, out of ten educational regions was conveniently sampled (McMillan & Schumacher 1998:397). To increase the sample size all the 97 Rural Day Secondary Schools in the selected region were included in the study (see section 4.3.2.1). Data on the internal efficiency of the schools was collected from various school documents. The data was presented using tables, graphs and percentages.

For the qualitative phase of the study five Rural Day Secondary Schools were conveniently selected on the basis of being accessible to the researcher (McMillan & Schumacher 1998:397; Marshall 1998:60). From each of the selected schools six school

managers (including some senior teachers) were purposefully selected to participate in focus groups that lasted at least one hour and fifteen minutes (McMillan & Schumacher 1998:397; Marshall 1998:60). The heads of the five selected schools participated in personal interviews that lasted at least forty-five minutes each (see section 4.3.2.2). Data from the focus groups and personal interviews were transcribed verbatim, categorised into themes and discussed (see section 4.3.2.3).

1.9 CHAPTER DIVISION

The study has six chapters, which are organized as follows:

1.9.1 Chapter 1: The problem and its setting

This chapter gives the background to the study; statement of the problem and the specific research questions; the motivation for the study and its importance; limitations of the study and the demarcation of the study. It also presents the definition of terms; aim of the study; research methods and design, and the chapter division.

1.9.2 Chapter 2: Review of literature: Quality of education

This chapter is a review of related literature on the following themes about the quality of education:

- Origins of the quality debate;
- The definition of quality of education;
- Models of quality as applied to education;
- Why quality of education;
- The costs of quality of education;
- Indicators of the quality of education;
- Indicators of internal efficiency of the school system;
- Barriers to quality of education; and
- Quality of education initiatives in chosen countries.

1.9.3 Chapter 3: Review of literature: Rural Day Secondary Schools in Zimbabwe

This chapter covers the literature under the following themes:

- Educational provision just before independence;
- Background to establishment of Rural Day Secondary Schools;
- Expansion of educational provision after independence;
- Quality concerns in Rural Day Secondary Schools;
- Financial management in education in Zimbabwe;
- Some efforts at improving quality of education in Zimbabwe.

1.9.4 Chapter 4: Research methodology and design

This chapter presents the research methodology and design. It describes and justifies the research design used; describes sampling procedures for both the quantitative and qualitative phases of the study; describes the data collection instruments and how the data was actually collected. Finally it describes the data analysis procedures used in the study.

1.9.5 Chapter 5: Data presentation, analysis and discussion

This chapter presents, analyses and discusses the data collected in the study in light of the specific research questions (1.2). The discussion focuses on the quantitative data on measures of internal efficiency of Rural Day Secondary Schools, as well as the qualitative data collected through focus groups from school managers and personal interviews with school heads.

1.9.6 Chapter 6: Summary, conclusions and recommendations

This chapter gives a summary of the study and draws conclusions to answer the research questions from the analysis of the data collected. It makes recommendations for

addressing the internal efficiency of Rural Day Secondary Schools as well as recommendations for further research, based on the findings of the study.

1.10 SUMMARY

Chapter 1 has presented the problem and, its setting. The background to the study; statement of the problem, specific research questions, motivation and importance of the study have been described in this chapter. The aim of the study, limitations encountered in the study, demarcations of the study, definition of terms, and a brief summary of the research design, have been explained. The next chapter is a review of related literature on the quality of education.

CHAPTER 2: LITERATURE REVIEW: QUALITY OF EDUCATION

2.1 INTRODUCTION

Education is one of the basic services offered by governments and other stakeholders to society. Authors like Bray *et al* (1986:40); Miller (2001:30) and Books (1996:3) posit that education is a tool for economic development. If education is to meet this goal, it must be of high quality. The concept of quality of education is multi-facetted, and is articulated differently by different scholars. It is also important to note that the debate on the attributes of quality of education is still in progress. Thus, with no conclusive position as to what makes quality of education, it is critical that as many views as possible are analysed have a comprehensive grasp of the key tenets of the quality of education. It is when a wider view of the quality of education is achieved that a fair attempt can be made in analysing the internal efficiency of an education system, which is a key dimension of the quality of education. The quality debate has evolved over the years, with various definitions of quality coined at each stage, and several models used to analyse quality. Several indicators of quality have also been forwarded and a similar array of barriers to quality has also emerged, which have challenged initiatives to institute quality of education in several countries.

2.2 THE ORIGINS OF THE QUALITY DEBATE

It is important to understand how the quality debate has evolved over the years and how it has come to be linked to the provision of education. Since this is a mere chronology of the unfolding of the quality debate there is very little, if any, disagreement in the literature. Sallis (1996:6) asserts that the quality debate came with the advent of industrialisation as the need to ensure that products conformed to specifications escalated and customers began to demand value for money. Wadsworth; Stephens and Godfrey (2002:98) say at this stage the focus was on product rather than process quality. Industrialisation led to mass production and division of work into small repetitive tasks, thus removing the hitherto self-checking quality thrust by individual producers and

workers. The quality responsibility shifted from the worker to the processes and systems in the organisation. The concept of quality control, which was basically inspection, came to dominate production lines. It was an activity undertaken at the end of the production process to detect defective products and stop them from reaching the customer, thus ensuring that only products meeting the pre-determined specification left the factory gate. Quality was made the prerogative of inspectors and the rest of the workers remained oblivious of the nature and need for quality. Needless to say, the defective products constituted a waste and an irrecoverable cost.

Greenwood and Gaunt (1994:6) point out that soon after World War II there was a shift to quality assurance. This thrust sought to return to workers, the responsibility for quality, but in a much more systematic and accountable manner. The thrust was to avoid producing defective products in the first place. This focus intensified in the United Kingdom, and United States of America in the 1980's and was linked with concepts such as total quality by Deming and others, later to culminate in Total Quality Control (TQC) in Japan, then Total Quality Management (TQM) proposed by the likes of Deming; Crosby, Peters and Juran, according to Greenwood and Gaunt (1994:7).

Below is a chronology of quality development as given by Sallis (1996:8):

Pre 1900: Quality as an integral element of craftsmanship;

1900 – 1920: Quality control by foremen;

1920 – 1940: Inspection based quality control;

1940 – 1960: Statistical process control;

1960 – 1980: Quality assurance / total quality control by the quality department;

1980 – 1990: Total quality management (TQM); and

1990 – to date: TQM – the culture of continuous improvement, organisation-wide quality management.

As social services like health, education, defence expanded and took in high portions of public funds, governments and communities started asking for value for money. Thus issues of quality started to transcend the boundary between the corporate world and the

public sector. The public sector, previously viewed as a not-competing sector, started to compete for resources with other segments in order to survive. Education was not spared as schools competed with other schools for students, and also competed for attention with other services. As customers had to make a conscious choice to put money in school or in another competing commodity they started to clamour for value for money. Inevitably the quality of education became an issue pursued by several organs such as Movement for Total Quality in Education (United States of America and United Kingdom) and Southern Africa Consortium for Monitoring Educational Quality (SACMEQ), to mention just two out of many the world over. This development, in a significant way, affirms the assertion by Liston (1999:11) that the infusion of quality and service concepts, drawn from the business world and adapted to meet the specific environments of educational institutions, is likely to drive reform into the next century. In spite of the quality debate having come a long way, there is still no one universally acceptable definition of quality. The next section reviews definitions of quality by various authors in order to come up with a conceptual framework of analysing quality of education.

2.3 WHAT IS QUALITY OF EDUCATION?

Quality is a fairly elusive concept to define. There are perhaps as many definitions of quality of education as there are people who care to define it; products or services that are consumed; and customers who consume the products or services. Thus, the concept of quality in a service (like education) is determined by the passive observer or critic; the service being delivered; and the way the customer views the service and the way it is delivered. Varied as they may be, the definitions of the quality of education generally converge on the analysis of information that might be employed to guide decisions about the provision of education. Hoy, *et al* (2000:10) say:

Quality in education is an evaluation of the process of educating which enhances the need to achieve and develop the talents of the customers of the process, and at the same time meets the accountability standards set by the clients who pay for the process or the outputs from the process of educating.

According to this definition the key aspects of quality of education are developing the talents of customers in a value-laden way, meeting accountability standards and giving value for money paid. Grisay and Mahlck (1991:3) partly concur with this position when they say evaluating the quality of an educational system entails analysing first and foremost:

- (a) the extent to which the products or the results of the education provided (the knowledge, skills and values acquired by the students) meet the standards stipulated in the system's educational objectives; and
- (b) the extent to which the knowledge, skills and values acquired are relevant to human and environmental conditions and needs.

The two definitions focus on standards, but this by no means makes them comprehensive, as there is no guarantee that those standards are worth achieving in the first place. Standards seek to relate to needs of customers, which shift rapidly, thus making the definition of quality of education an elusive and rapidly shifting concept. Goddard and Leask (1992:20) highlight the place of customers in the definition of quality when they say, "Quality then is simply meeting the requirements of the customer." For education, there are different customers, who include parents, government, students, employers, and institutions of higher learning, who all look for different characteristics of quality. The different customers do not only have different expectations of the education provided, but these expectations also change with time, making the quality of education a moving target.

The definition by Grisay and Mahlck (1991:13) is further limited as it ignores, among other things, a direct focus on customer delight, value for money and issues of efficiency in realising the product, contrary to the view held by Huxtable (1995:9) that, "The customer is now firmly established as reigning monarch of global economies." Parents and students are becoming more and more aware of what is good for them, and resources for education are limited, thus efficiency cannot be overlooked as a critical variable in defining the quality of education. It must also be noted that education is a service rather

than a product, thus its quality cannot lie exclusively in the final output, rather its quality should also be manifest in the delivery process. Thus internal efficiency is a core aspect of the quality of education. Grisay and Mahlck (1991:5) further say the notion of quality of education should also take into account such determinants as provision of teachers, buildings, curriculum, equipment, textbooks, and the teaching process. They opt for a three dimensional composition of the quality of education comprising the quality of human and material resources available for teaching (inputs), the quality of teaching practices (process) and the quality of results (outputs and outcomes). Grisay and Mahlck (1991:5) also say, "There are also some indicators which are frequently used by planners in developing countries as approximate means of measuring quality, for example repetition, dropout, promotion and transition rates." Quality then refers to those measurable and felt attributes of a product or service that enhance customer satisfaction. The study focused on these and other similar indicators to analyse the quality of education in Rural Day Secondary Schools in Zimbabwe. If there is optimum relationship between inputs and outputs internal efficiency is likely to be high. These indicators help to take stock of inputs assigned to the education system. However, confining analysing the quality of education to just a few enumerable indicators may yield a very limited conception of the phenomenon, as quality must pervade the whole process of educating learners. A more encompassing definition is therefore called for.

Liston (1999:4) defines quality of education as the total effect of the features of the process or service on its performance or the customer's, or client's perception of that performance. McMahon (1993:23) holds a similar notion, when he says the quality of an output of education usually means such things as contributions to rational thinking, problem solving skills, good judgement and creativity. These views imply that quality is not just a feature of a finished product or service, but involves a focus on internal processes and outputs and includes the reduction of waste and the improvement of productivity. This view of quality of education implies that quality cannot be measured by looking only at the outputs, which are examination results. Rather it should take into account the analysis of the internal efficiency of the school system, which enables control for wastages that come in the form of school dropouts, repetition rates, poor examination

results, low survival rates, average study time per graduate, and wastage ratios. Liston (1999:4) further argues that quality is related more to the relevance and value of each institution's mission, purpose, goals and objectives, and the achievement of identified outcomes. What emerges from this view is that quality can be more effectively assessed, by looking at what happens in the school, rather than broad policy parameters. This stance is consistent with Heneveld's (1994:1) argument that while most of the national reform efforts seem to assume that a national policy and the delivery of inputs to schools will ensure quality of education, the impact on students of efforts that ignore the internal trends within the school is usually limited. This is true as the school is where educational objectives are operationalised and the success or lack of it must be analysed at this level. Heneveld (1994:2) further argues that, "...it is the central role of the school, in all its complexity, that needs more attention in the planning and evaluation of educational quality in Sub-Saharan Africa." In the Zimbabwean context the majority of the disadvantaged population whose education needs vast improvement are in rural areas. Access to education is the pillar of educational objectives for them. Low levels of internal efficiency in the school system would hamper the achievement of the identified educational objectives. Hence this study sought to analyse the internal efficiency of Rural Day Secondary Schools as a variable in managing the quality of education. Quality has a lot to do with improving the key process of an organisation, such as the internal operations.

While Liston's (1999:4) and McMahon's (1993:23) definitions seem all encompassing, they have a common weakness. Their focus on "total effect" and "problem solving skills," respectively implies that quality of education can only be measured when the process of educating has been completed for an individual. This would lead to anomalies and wastage going on unchecked for too long and it would not be easy to correct the mistakes. Secondly "total effect" and "problem solving skills" cannot be measured consistently and objectively. This would make comparisons within and between education systems difficult.

Hoy, *et al* (2000:2) say quality is what is good for the school and its students. They quote Edward Deming as saying, “A product or service possesses quality if it helps somebody and enjoys a good and sustainable market,” a view shared by Wadsworth, *et al* (2002:15) who see quality as fitness for use. These definitions are consistent with the assertion by Huxtable (1995:9) that, “...quality is the satisfaction of agreed customer requirements.” What is good for any school is basically the achievement of agreed targets and this ensures that the school will enjoy a sustainable market. If a school system’s internal efficiency is low resulting in low pass rates, high dropout rates, and low survival rates, that school system is not able to help its students, their parents and the community who constitute the clients. With a low internal efficiency the school system would be unpopular and have no sustainable market, nor will its graduates fit well in the job market. Thus, low internal efficiency compromises the quality of education offered.

Another way of looking at the quality of education is to use the effective schools view, which advocates for the black box technique of measuring inputs and outputs. For a social service like education, this approach cannot be applied in total as it overlooks certain immeasurable attributes of good education that cannot be read from mere pass-rates. The extension of the analysis of the quality of education beyond mere pass rates is also supported by Miller (2001:1) who observes that in a bid to respond to growing public pressure to improve the quality of education, policy makers at all government levels are pressing for higher standards in education and, “Governors are instituting state standards and assessments, and many states are tying them to grade promotion and graduation.” The focus on promotion and graduation is a measure of the internal efficiency of the school system, which is the focus of this study. Hoy, *et al* (2000:5) refer to the 1998 Phi Delta Kappa/Gallup poll of the public’s attitude towards public schools’ effectiveness. The percentage of students graduating from high school was rated highest (82%), while scores of students in standardised tests was ranked lowest (50%). The public thus sees quality more to do with the effect schooling has on an individual, rather than just examination results. Therefore quality is a felt abstract rather than a tangible absolute.

Sallis (1996:10) says the definition of quality is variable, but quality is very easy to feel when it is lacking, and in education quality makes the difference between success and failure. He sees quality as a two notional concept, that is: quality as an absolute and quality as a relative. As an absolute quality connotes an ideal about which there can be no compromise: the highest possible standard that cannot be surpassed, rarity and high price. In education this would apply to an elitist and exclusive system. In this study this view would not apply as Rural Day Secondary Schools in Zimbabwe are low-cost institutions set up to improve access to schooling among the economically vulnerable rural people. This view also does not tie in well with the concept of Total Quality Management in education.

On the other hand quality as a relative notion takes the line of quality assurance and Total Quality Management. Quality is not an attribute of a product/service, rather, it is something ascribed to it. While quality is about measuring up to some specification, it is not an end but a means by which the end product is judged to be up to standard. Moreover Sallis (1996:14) says it need not be expensive and exclusive. Maintaining a related view Whitaker (1998:110) argues that quality is relative to resources, which implies that even rural schools, which have limited resources, can still achieve quality of education, within the context of available resources. He (1998:110) further says quality is a relationship between expectation and outcome. Pursuing the thinking that even in the wake of limited resources quality can still be instituted, Deming (1986:5) argues that affluence is not a pre-condition for quality. He cites the example of Japan who by 1950 was devoid of natural resources but led the world in quality products. In the context of this study stakeholders expect maximum internal efficiency in the Rural Day Secondary Schools, thus it is important to assess if this expectation is being met. The assertion that low-cost as they may be, Rural Day Secondary Schools can still deliver high quality education if they meet the purpose for which they were set, that is: improve access to secondary education for the rural population is in tandem with the British Standards Institution's definition of quality, which simply states, "Quality is fitness for purpose."

Sallis (1996:15) further splits the relative concept of quality into procedural quality and transformational quality. Procedural quality stresses issues of effectiveness and efficiency, that is producing what is fit for purpose without much wastage, and this in education is the focus of internal efficiency. Price and exclusivity are not an issue of concern, rather quality is directed by auditing the operations to address variations in the process instead of the product. In support of this view Sallis (1996:15) says, “Education results measured against performance indicators are a good example of this.” In the case of this study the indicators of internal efficiency are the performance indicators against which the quality of education in Rural Day Secondary Schools in Zimbabwe are measured. This is an accountability approach concerned with ensuring consistency and conformity, based on hard indicators of measurable performance.

On the other hand, Sallis (1996:15) postulates that transformational quality focuses more on organisational transformation rather than internal systems and procedures. The thrust is to make the organisation customer focussed, rather than product focused. Thus quality is inclined towards intangibles such as customer care, customer service and social responsibility. But there is need to use some quantitative indicators to enable comparability and consistency. The case for inclusion of measurable or tangible aspects in the measurement of quality of education, which is at variance with the view of Sallis (1996:15), is strongly advocated by Whitaker (1998:104). He maintains, “Impressions and opinions are not sufficient grounds to assure us that the conclusions we draw about the quality of our work are safe and secure.” This view supports the analysis of the internal efficiency of schools to generate data to augment whatever judgements accrue from impressions and opinions. Procedural notions of quality are essential, but are not enough to keep customers loyal. Whitaker (1998:110) concedes a compromise between the two extremes when says, “Quality brings objectivity and subjectivity into a powerful alliance”, a view shared by Wardsworth, *et al* (2002:15) when they argue that there is both an objective and subjective side to quality.

If transformational quality is lacking in a school system the students will drop out and survival rates will be low. Moreover if the customer is not well cared for, pass rates will

be low and repetition rates high. This results in a waste of resources and compromises the internal efficiency of the school system. To retain its clients and help them move through the education cycle efficiently, the school must establish customer needs and put in place structures and organisational cultures which empower teachers to meet those needs, or else the retention capacity of the school system will suffer. This view of quality goes just beyond fitness for purpose, to excellence. Sallis (1996:16) posits that in an educational setting, the transformation of culture is a function of staff motivation and academic leadership in an environment that is student centred. This notion implies that quality is not determined exclusively by material inputs, rather human beings must be willing and able to deliver the quality. Leadership charts the direction of the quality to be pursued in order to satisfy the student. Sallis (1996:15) further points out that quality can be seen to be achieved by putting systems and procedures into operation and ensuring that those systems are efficiently and effectively operated. This view appears based on the concept of quality assurance that emphasises monitoring the production process to eliminate faults before the final product. It emerges then that quality is a function of inputs, personnel motivation, effective leadership, appropriate systems and procedures, and the efficient operation of the systems.

The views of Sallis (1996:15-16) in analysing the quality of education are inclined towards Total Quality Management (TQM). According to Davies and West-Burnham (1997:21) the following are features of TQM:

- Status of customers;
- Emphasis of values and missions;
- Management of processes; and
- Significance attached to the management of people.

It is vital that these features are well integrated to ensure a holistic view of TQM. In the school system this would entail attending to needs of students and society, teachers' professional needs, and ensuring that measurable performance is realised. Smit and Cronje (1997:51) say, according to Deming, TQM emphasises use of statistical control to

reduce variability in the production and ensure uniform quality and predictable quantity of output. If trends in the internal efficiency of the school system are statistically analysed, variations in performance and wastages can be controlled for. This ability to control for the undesirables, can lead to customer satisfaction, meeting of customer expectations as well as continuous improvement of both processes and products. TQM helps to prevent mistakes, rather than identify mistakes that would have occurred, which is quality control.

Cotton (2001:4) says TQM has three critical 'C's, viz: the customer, the culture and the capacity. He further states that:

The “lead factor” in TQM is the process of systematic change itself. The point is to develop the organisation as an integrated, organic set of relationships and to gain the ability to change and direct those relationships again and again in the direction of improvement as directed by the organisation’s internal and external customers.

The notions held by Sallis (1996:15-16) and Cotton (2001:4) coincide with those of Liston (1999:63) who stresses that a quality approach focuses on identifying client needs; developing and tapping the full potential of staff and improving processes. What transcends all these views is the fact that quality seems to be embodied in people and what they do rather than in a product that goes out to the market. This view is readily consolidated by Gatiss (1996: 4) when he cites Deming proclaiming that, “ Quality is about people and not products.” Steyn (2001:18) summarises quality management by saying that it includes the product; customer; customer satisfaction and efficiency

2.3.1 Customers in TQM

Bell, McBridge and Wilson (1994:3) maintain that in a total quality perspective the institution has two types of customers: internal customers and external customers. In support of this position Huxtable (1995:53) argues that, “...in order to satisfy external customers each individual within the organisation should be viewed as both an internal customer and internal supplier.” Internal customers are those in the organisation who

receive the output of others' work to help them create a product/service for the ultimate customer. In agreement with the concept of internal customer is Gatiss (1996:17) who says internal customer is the term used to describe the relationships inside the organisation, between different functions, departments and people. Internal customer-internal supplier relationships thus relate to how people inside an organisation exchange information, documents and instructions. In the education system these would be teachers who receive inputs from policy makers, management and planners in order to plan and deliver instruction. If they are satisfied, it is likely that they will in turn satisfy students and the society. When students receive instruction from the teacher, they are the internal customers and the teacher is the internal supplier. Conversely when students respond to tasks given by the teacher, they are the internal suppliers and the teacher is the internal customer.

External customers are those that consume the product or service. Gatiss (1996:17) says external customers are those people who consume the product or service of concern. There are user-only customers who do not pay for the service but consume it (for instance, students receive tuition, but parents pay for it; and employers use the skills learnt at school but they do not directly pay school fees); paying non-users (parents), and paying users. There is considerable disagreement on whether students are external customers, internal customers, or the products of the education system. If they are deemed to be buying knowledge from the school, they are external customers. If they are deemed to be part of the school and participate in the delivery of their own learning, they are internal customers. If they are the human capital that schools produce for the work place, then they are the products. This complicates the analysis of quality in education.

Notwithstanding these disagreements about the status of students, it emerges that a customer in an education system is any person who has a sustained interaction with the system by way of supplying inputs or receiving outputs. The inputs and outputs can be tangible materials or intangible services. To satisfy these customers a specific kind of organisational culture based on trust and shared decision-making is essential for total quality management to succeed. Management must deliberately create this culture.

Again the leadership must exhibit the capacity not merely to change, but to manage and instill the change process itself, what Deming (1986:24) calls the “constancy of purpose.”

2.3.2 Leadership in TQM

One necessary condition for an organization to satisfy customer needs is that there should be leadership with a vision of what to supply to customers and how best to do it. Steyn (1999:21) argues that leadership should strive for the involvement of all stakeholders in pursuing a vision that has been set by the leadership. Quality requires outstanding leadership. According to Barry (1991:8), TQM must start at the top and be driven by top leadership, which must develop principles and values that enhance continuous improvement. In the context of Rural Secondary Schools the leadership that ought to drive the quality vision comprises Education Officers and heads of schools. To reinforce this view Steyn (1999:22) quotes a teacher from an American school that benefited from TQM adoption saying, “We were fortunate to have a superintendent who was a visionary.”

The aim of leadership in TQM is the improvement of performance, improvement of quality, increase of outputs and instilling pride of workmanship in people (Deming 1986: 248). This aim can be realized through removal of causes of failure and improving systems and processes on a continuous basis.

Creech (1994:363) posits that leadership is learnt from others, through study and experience. This notion is in line with the view held by Steyn (1999:23), that commitment of leadership infiltrates all levels of schooling. There is thus a need for leadership to train people at all levels of the school to enable them to participate actively and meaningfully in TQM.

2.3.3 Training in TQM

Successful implementation of TQM is the result of the training of facilitators to lead school planning teams in addressing quality (Steyn 1999:33). Deming (1986:248) says training enhances learning; reduces defectives and optimises productivity. Training helps people cope with situations arising from their areas of performance, and can focus on such aspects such as advocacy for the vision; evaluation; data collection and analyses. Creech (1994:90-91) sums up the importance of training in TQM when he argues that training of people extensively and at every level plays a vital role in transforming an organisation. The training programme must be formalised and concentrate on various echelons of management such as executives, managers, supervisors and team leaders. For Rural Day Secondary Schools this would entail training Education Officers; school heads and teachers. Payback from training dwarfs the cost of training (Creech 1994:91). So training can be instituted in a school with a view to reducing the cost of producing unquality service. Training, like any other aspect of TQM, must be well catered for in the organisation's strategic plan to be effective.

2.3.4 Strategic planning in TQM

Steyn (1999:23) points out that the need to conceptualise what to do is the first step towards quality, a view shared by Sallis (1997:105) who says strategic planning enables the formulation of long term priorities. Shipengrover and Conway (1996:36) identify establishment of expectations for change; demonstration of trust and commitment in processes, and provision of a mechanism as the tasks of strategic planning. The mechanism entails identifying and providing, resources and matching them with people and tasks so as to align the organisation to the future.

Strategic planning also helps to clarify and sell the vision that the leadership will have set. Once the vision is accepted and shared by all players, it becomes easy to implement quality (Frazier 1997:105; Daugherty 1996:83). To ensure the vision is shared, there is a need to adopt shared decision-making; decentralisation; use of planning teams, among other strategies (Steyn 1999:24). This involvement tends to empower people in their quest for quality.

2.3.5 Teacher empowerment in TQM

There are perhaps two critical reasons why teachers must be empowered in the pursuit of quality of education. The first is that teachers provide the interface between the education system and the students, and the second is that teachers manipulate and control all the other resources used in teaching. Empowerment creates a feeling of being in control of a situation (Steyn 1999:28). Thus teachers would be more effective if they deemed themselves in total control of the learning situation.

Quong and Walker (1996:224) say TQM is all about empowering people closest to the customers so they can decide on the best ways to improve. Teachers, especially in rural areas where no other education authorities are present, are closest to the customers (parents and students), and thus they are the direct link with quality. The importance of empowering teachers is aptly summarised by Weller (1995:15) when he explains that quality education can only result when teachers are totally committed. This commitment can only occur when teachers are empowered. Lack of empowerment adversely affects morale. Thus empowerment is a necessary condition for commitment.

2.3.6 Commitment to continuous improvement

Quality is meeting customer requirements (Goddard & Leask 1992:20). But customer requirements shift with place and time, so it is necessary that the organisation commits itself to continuous improvement to meet the changing requirements of customers always. Some aspects that need to be continuously improved are goals and objectives, processes, and resources (Bonstingl 1996:16; Frazier 1997:16). Information must flow in both a top-down and bottom-up path to ensure there is improvement in all aspects of the school. External customers like employers; parents and institutions of higher learning can also feed in information that can promote continuous improvement in a school. Smit and Cronje (1997:51) argue that statistical control can be used to ensure continuous improvement in an organisation, but other qualitative data must also be used. There are a

number of educational institutions that have applied TQM and realised continuous improvement.

2.3.7 Examples of institutions that have applied TQM principles in education

Deming (1986:23) argues that the fourteen points he espoused for Total Quality Management apply anywhere, to small and large organisations, to service and manufacturing industries, or even divisions within a company. This implies that the approach can be applied to secondary schools, a view corroborated by Steyn (2001:24) when she argues that TQM "...comprises a modest enough beginning but has the capacity to bring about immense change in the functioning of educational institutions." Hayward and Steyn (2001:106-108) carried out a study on the potential of TQM in education in a school in South Africa and found out that it helped the school to increase its resources (a new classroom block was constructed); the school was able to meaningfully teach computers and educational guidance and fees collection increased from 65% in 1993 to 98% in 1995. They (2001:104) further argue that benefits of TQM in education include the following: students being more involved in after-school activities; reduced conflict among staff members; academic improvements; fewer disciplinary problems, and reduced dropout rates. Further evidence of the applicability of TQM to education is provided by Hayward (1999:i) who carried out a study that adapted the TQM philosophy to educational practice. Hayward (1999:i-ii) concluded that TQM could be used to improve areas such as the curriculum, physical resources, staff development, extramural activities, learning and financial management of the school. He states that, "It is possible to transform South African schools into institutions where all stakeholders can experience education of true quality." Such benefits are obviously needed in any school, especially those characterised by shortage of basic resources. They would thus benefit from adopting TQM.

Another illustration of the application of TQM to education, cited by Cotton (2001:4-10) is the "Mt Edgecembé High School's Modified Deming Points for Quality in Education" an adapted version of Deming's fourteen points for quality in organisations. The design

added a fifteenth point, which is putting everybody in the community to work to see the accomplishment of the transformation. Teachers and students work together and jointly plan and measure the success of projects. Cotton (2001:13) explains that this approach has resulted in students contributing to their own enhanced improved performance.

This is an all-inclusive approach to quality, which is based on the view that all members of an organisation have something to offer towards its development. Hayward and Steyn (2001:104) summarise the relevance of the model to education by saying in education TQM should be adapted to give a distinct identity to those endeavours that improve quality in the educational sector compared to other sectors of society.

Various authorities assign different meanings to quality of education. There are a lot of similarities and differences in the conceptions of these authorities. While no one definition seems to suffice, the following tenets appear to characterise quality of education as explained by authors like Grisay and Mahlck (1986:3); Liston (1999:4); Sallis (1996:10) and Deming (1986:24):

- It is a result of proper planning and does not come on its own;
- It is relative and dynamic;
- It is hinged on predetermined standards;
- It is not necessarily tied to high price and exclusivity;
- It manifests itself in customer satisfaction;
- It transcends the entire organisation;
- It is felt rather than seen;
- Certain indicators can be used to describe it;
- Its absence is easily felt;
- There is a cost for the absence of quality; and
- It is a function of the management of available resources.

Quality is thus the degree to which the product or service satisfies the needs and expectations of the internal and external customers at an affordable cost. Cost

affordability is a function of avoidance of wastage in the production and delivery of the product or service. To gain a deeper insight of the concept of quality it can be analysed using some existing models. The models generally augment, rather than contrast each other.

2.4 MODELS OF QUALITY AS APPLIED TO EDUCATION

The multi-dimensional nature of quality of education, as evidenced in the various definitions open up several models for analysing the quality of education. It is not easy to say which model of analysing quality of education is best since t all seem to have significance and the best option may be to blend the models.

In the ensuing paragraphs eight models of quality are outlined: Quality Control; Quality Assurance; Creating Quality Communities of Learners Through Quality Management; Philip B Crosby's Zero Defects Model; Joseph Juran's Project Management; Malcom Baldrige's Quality Criteria; Deming's Total Quality Management; and Shewart's Cycle.

2.4.1 Quality control

This is the oldest concept of quality, a view held by Wadsworth, *et al* (2002:27) when they say, "Quality is the original and most basic term for the application of quality principles." They (2002:27) define quality control as, "...the regulatory process through which we measure actual quality performance, compare it with standards, and act on the difference." It entails the determination and elimination of components or final products that do not meet predetermined specifications. Sallis (1996:19) says, "It is an after-the-event process concerned with detecting and rejecting defective items." While it makes an effort to ensure that defective products do not reach the customer, it allows for both allocative and X-inefficiency. It thus draws a lot of internal costs of failure, as work is re-done or thrown away leading to large wastages. In the internal efficiency of the school it would be the equivalent of not correcting the system until students have failed terminal

examinations or failed to get relevant skills. By virtue of its nature quality control allows waste to be built into the system. The methods of control for quality are usually inspection and testing masterminded by inspectors, who enjoy the monopoly of detecting quality and defects. The other weakness of this approach is that quality becomes a concern only for inspectors. Bedward (1997:153) says, "A more serious disadvantage that can occur with centralised inspection is a change in the attitude of the operatives, who adopt the view that quality is the task of a small specialised section and therefore not their responsibility." In a school system the teachers are the operatives and it is vital that the attitude alluded to, does not, develop among teachers.

In a school system if quality becomes only the concern of school inspectors, it cannot be achieved as inspectors are not involved in the day to day teaching and learning activities. Quality control is thus not a sufficient strategy for ensuring quality. There is a need to assure quality in the process rather than merely check for it in the output. In spite of its shortcomings, quality control constitutes a vital component of the more recent quality models. Bell, *et al* (1994:2) maintain, "Quality control may be viewed as a subset of quality assurance."

2.4.2 Quality assurance

Oakland (1995:13) says, "Quality assurance is broadly prevention of quality problems through planned systematic activities (including documentation)." Wadsworth, *et al* (2002:29) say quality assurance is a system of activities whose purpose is to provide an assurance that the overall quality control is in fact being done effectively. The Quality Assurance Agency (2002:1) clearly agrees with these views by arguing that quality assurance is, "The totality of systems, resources and information devoted to maintaining and improving the quality and standards of teaching, scholarship and research, and of the students' learning experience." This involves an audit of the system and its key operations as well as establishing a good quality management system. This view is corroborated by Sallis (1996:19) who says of quality assurance, "It is a before and during the event process." Both authors agree that the focus of quality assurance is the

prevention of defects rather than the identification of the defects when they have already occurred. Quality assurance is thus a way of managing quality by ensuring that quality is designed into the process rather than the product, and thus the costs of rectifying defective outputs is substantially foregone. The production process is well defined and teams are set up to implement it. Quality becomes a concern for the workers, and the thrust is to get things right the first time, every time.

Danks (1996:471) sees quality assurance not just as an activity in production, but as an approach to production and the checks and audits, which are carried out to ensure that quality control procedures are followed. It involves working with suppliers to ensure that materials and components meet required standards to produce quality outputs. This view is similar to the view held by Oakland (1995:13) and Sallis (1996:19) in that quality assurance is built into the production process and focuses on preventing, rather than merely detecting faults belatedly. However, it clearly is an augmentation of quality control and other earlier models and not a substitute. That quality assurance compliments earlier quality models is also supported by Whitaker (1998:110). He argues that quality assurance refers to the determination of standards, appropriate methods and quality requirements by an expert body, accompanied by a process of inspection or evaluation that examines the extent to which the practice meets the standards.

A new dimension brought in by Danks (1996:471) is that of extending the focus of quality assurance beyond the boundaries of the organisation and working with suppliers to ensure quality outputs. This links quality assurance to supplier customers, from a relationship-marketing point of view. Danks (1996:127) extends the concept of quality assurance close to TQM when he argues that quality assurance ensures that customers receive goods and/or services that give them satisfaction. The focus of quality assurance on customers is further supported by Stephens (2003:1), who posits that quality assurance is best described as, "...making promises and providing evidence of keeping them." Quality assurance thus is a process of evaluating the extent to which the institution is delivering on its promises. The institution can deliver on its promises if it does not

supply defective products or services. Only defect-free products or services will satisfy customers.

It must be noted that while basically quality assurance is a process of preventing defects, that process is not an end to itself. Rather it is a means towards satisfying customers. Stephens (2003:1) says quality assurance is necessary in the wake of shrinking public funding, growing stakeholder participation in education, and a growing demand for accountability and efficiency by customers. What emerges from this view is that quality determination is not the preserve of the organisation, but transcends organisational boundaries, thus creating communities that hold a stake in the quality of the product or service offered.

2.4.3 Creating quality communities of learners through quality management (J J Bonstingl)

This model draws from TQM thinking and proposes four pillars of TQM that constitute quality. Steyn (2001:114) argues that there are five pillars of quality for education, and that these pillars are a prerequisite for total quality in education. The model's pillars are: customer-supplier focus; personal dedication by everyone to continuous improvement to everything; processes/systems, and management accountability to TQM. Steyn's (2001:114) view is that the pillars consist of customer focus; total involvement; measurement; commitment, and continuous improvement of operations. These two views on the pillars actually support each other as customer focus is the same as customer-supplier focus (there can be no customer without a supplier); total involvement is the same as team work that is a key tenet of improving processes/systems, but it also calls for personal dedication by everyone. Commitment of management to total quality coincides with management accountability for quality management, while continuous improvement is directly articulated in both views. However, Steyn (2001:114) adds the dimension of measurement, which is an improvement on the model as it helps to quantify performance and gaps, and thus enhances rationality of the model.

The focus on customers stresses that the entire school organisation must focus on meeting human needs by building relationships of mutual support with people inside and outside the school. Each individual is both a customer and a supplier and has a clearly articulated role to ensure quality service. Kanji (1995:460) says of this approach, “Team work and collaboration must be emphasised if schools are to create high quality benefits for the greatest number of people.” The team concept can also be extended to teacher–student teams for specific tasks.

Total involvement calls for personal dedication by everyone to continuous improvement of everything gradually. The school adopts the ‘Kaizen’ concept of continuous betterment at the work place, home and community. Quality circles can be set up to improve processes; services and products and they go a long way in empowering workers. Team support is directed at both the academic and the personal approach.

Total involvement encompasses setting up processes/systems that will drive the approach to TQM. There needs to be a system of managing quality that enables people to go through the defined processes ably. According to Edward Deming 80– 90% of things that go wrong in an organisation are attributable to the system, rather than individuals. There is a need to better both the people and the system. Teacher–student efforts must be tapped to improve instruction, while teacher–administrator efforts must be harnessed to fine-tune rules, policies and the operational culture.

Daughterty (1996:85) argues that the main difference between TQM and the traditional approaches to educational reform is the use of measurement. Both qualitative and quantitative measurements can be done using a variety of tools such as benchmarking and flow charts. Commitment of management ensures that TQM starts at the top and management is accountable for the change management. School leaders must remain accountable for both successes and failures, and lead by example.

Continuous improvement means that no process or output is to be considered perfect.

Barry (1991:9) maintains that the most difficult task may be to convince an already successful organisation to adopt TQM. But this should not be the case as challenges and conditions under which success is realised vary with time, location and culture, and the systems that yields quality service can be continually refined.

2.4.4 Malcolm Baldrige quality criteria

According to Kanji (1995:461) this model is the operationalisation of the systems theory, organisational learning and TQM. It has two key elements, which are:

1. Identification of, and focus on desired outcomes (what students need to know and be able to do to be deemed successful); and
2. Creation of a system of institutional requirements wrapped around these outcomes to get exceptional outcomes. This can be realised by instituting the following, activities: leadership; information analysis (analysis of performance indicators); strategic and operational planning; human resource development; educational and business process management (avoiding wastage); school performance appraisal (analyse pass-rates, and repetition rates), and student and stakeholder satisfaction drives, through use of learning cycles. All activities and processes must be guided by students' needs, which reflect the core values of society.

The leaders must be actively involved in quality activities by way of training staff, setting and focussing the vision of the institution, liaising with the community, doing performance reviews and generally using data for strategic directions. The quality pursuit is both multi-level and multi-unit and the organisation must allow for both vertical and horizontal open communication. In disadvantaged schools this is an imperative as generally teachers deployed there are of inferior qualifications and parents find it difficult to interpret government policy due to their low levels of literacy. Obsolete programmes must be discarded and a culture of fast response developed. Upstream interventions help reduce the cost of corrective action. In this regard Rural Day Secondary Schools could establish quality links with their feeder primary schools.

Management by fact, which stresses collection and analysis of data, must guide all decisions.

In summary the Baldrige framework consists of:

- A driver, who is the leader setting values, systems and levels of accountability;
- A system, which has four building blocks: education and business management processes; human resource development; strategic planning, and information and analysis;
- Measures of progress, which is the use of quantitative indicators of performance;
- The goal, which is students' focus and student and stakeholder satisfaction.

Kanji (1995:65) sums this approach by saying, "The Baldrige holds promise of accelerating improvement efforts by serving as a framework to align institutional activity for achieving ever improving outcomes." Improving outcomes can be measured by a reduction in costly defects, and a fall in customer complaints arising from defective products.

2.4.5 Philip B. Crosby's zero defects approach

Morehouse (1996:57) maintains that this approach believes in total elimination of defects to reduce costs. It is premised on four absolutes: quality is conformance to requirements; the system of realising quality is prevention; the performance standard for quality is zero defects; and the measurement of quality is the price of non-conformance.

According to Sallis (1996:19), this approach to quality makes quality the responsibility of work-teams rather than inspectors, but inspectors still play a critical role. It is an extension of quality assurance and seeks to build a culture of quality. It focuses on getting the thing right first time, and all the time. Arguing that the customer is sovereign, Crosby says the customers must always get what they want, where they want it and how they want it, which is a subscription to the marketing mix (product, price, place and

promotion). But because education is a service, rather than a product, its marketing has to be specialised and take into account the unique characteristics of services, which are intangibility; inseparability; perishability and heterogeneity. These characteristics make the quality of education lie more in the process of delivery rather than the product. Thus the behaviour of teachers, administrators, Education Officers, support staff will go a long way in influencing the perceived quality of education from the school system, and reduce costs of correction. Crosby (1999:1) says, “Quality is free. It’s not a gift, but it is free. What costs money are all the unquality things – all the actions that involve not doing jobs right the first time.” Morgan and Murgatroyd (1994:193-194) and Sallis (1996:48-50) stress the all-encompassing nature of the model when they argue that Crosby’s model is summarised into fourteen points as follows:

1. Management commitment through a clear quality policy statement;
2. Setting up a quality improvement team representing all departments, to set and direct the quality programme in the organisation. The plan must be endorsed and supported by management;
3. Quality measurement. Data from inspectors, tests, and customer feedback is used to measure current and potential non-conformance and to allow objective evaluation and corrective action;
4. Quantifying the cost of quality, which is the valuation of the cost of scrap, re-work and things going wrong;
5. Building of quality awareness, which is the raising of awareness on quality and its costs, and thus the need to continually improve;
6. Corrective action, where supervisors work with staff to eliminate poor quality;
7. Zero defects planning. The quality improvement team plans the zero defects programme (complete elimination of defects) and staff sign a contract to work towards zero defects;
8. Supervisor training. Management is formally trained to understand their role in quality;
9. Zero defects day, which is a day-long event to highlight the inception/launch of a quality drive. It improves quality awareness;

10. Goal setting, where staff, complete individual action plans based on specific, and measurable objectives;
11. Error-cause removal. Here the workforce is enabled to communicate barriers to management, using a standard instrument;
12. Recognition. At this stage performance is reviewed and achievement recognised and rewarded;
13. Establishment of quality councils, which is the bringing together of quality professionals to decide how problems can be tackled and effectiveness of the quality programme monitored; and
14. Do it over again.

Apart from ensuring zero defects it must be understood that every product must be suitable for the purpose it is meant to serve. So fitness for purpose is another critical variable in quality analysis.

2.4.6 Joseph Juran's Project Management

According to Huxtable (1995:10) Joseph Juran's Project Management approach focuses on the fitness for purpose rather than specification. Quality is driven by sound management decisions that enable setting up of structures that facilitate easy flow of processes. Juran believed in the 85/15 rule that says 85% of the organisation's quality problems are a direct result of poorly structured processes, thus putting the systems right means putting the quality right. In support of this focus on management in the model, Sallis (1996:46) points out that Juran extended his ideas to Strategic Quality Management (SQM), which is a three-part process based on staff at different levels including their unique inputs into quality.

Top management is responsible for charting the strategic vision; middle management is responsible for the operational view, while the work force is responsible for within-process quality control. In the school context top management would be Education Officers, school heads, middle management and teachers, the workforce. Sallis

(1996:46) says quality control is experienced by teachers operating in teams who design the characteristics and standards of programmes of their students, and explains that Juran's approach is summarised into the following ten points:

1. Build awareness of the need and opportunity for improvement;
2. Set goals for improvement;
3. Organise to reach the goals (establish a quality council, identify problems, select projects, appoint teams, designate facilitators);
4. Provide training;
5. Carry out projects to solve problems;
6. Report progress;
7. Give recognition;
8. Communicate results;
9. Keep score; and
- 10 Maintain, momentum by making annual improvement part of the regular systems and processes of the company.

While Juran viewed quality as fitness for purpose Deming viewed quality as continuous improvement. The two views do not necessarily contradict each other, as purposes often change and continuous improvement will ensure a sustainable fit for purpose.

2.4.7 Deming's Total Quality Management

Total Quality Management was propounded by Edward W. Deming. Deming (1986:31) argues that quality is the ability to meet customer needs, *at all times* and striving to exceed them whenever possible. Deming (1986:31) viewed quality as related to continuous improvement of processes and the product or service to keep pace with changing customer demands. There is need to understand the process as its performance equates the quality in the organisation.

Greenwood and Gaunt (1994:78) say, “The process is the transformation of a set of inputs, which may include materials, actions, methods, people and operations into desired outputs in the form of products, information, services, skills, or – generally results.”

At every supplier–customer interface there is some transformation and each activity is a process that carries a significant portion of the organisation’s quality. The quality of the outputs is a function of the quality of the inputs, plus the management of the process. The process contains variations around some mean performance and the degree of variation is measurable. Over time the process becomes predictable, but the predictability can be broken by extreme variances from the mean. Usually extreme variances result from special causes external to the organisation, and the remainder of the variances is attributable to common causes within the process. Management must train workers to appreciate, identify and deal with problems swiftly always, at all levels. Deming’s TQM model is an all–level, all–worker, cross–department and all–time improvement of the process to eliminate defects. It is continuous. Bedward, *et al* (1997:153) point out that TQM implies that management must train and motivate staff both to enable and to empower them to take responsibility for their own performance. Functional barriers must be broken down to enable every one to work to satisfy the needs of internal and external customers. The customer must be seen not only to be the external purchaser and end user, but also the internal customer–colleagues and other departments. The next person to handle your work is one of your customers.

Deming (1986:24-86) outlines his fourteen points as follows:

1. Create constancy of purpose for improvement of product and service.

In a situation characterised by low internal efficiency this ideal would not be achievable as students would fail, spend too much study time at one level and dropout, thus making it impossible for them to enter meaningful positions in society.

2. Adopt the new philosophy.

This point stresses the role of management in implementing quality and in the context of this study the school management would need to analyse data on internal efficiency of the school system then take up the challenge to better the situation.

3. Cease dependence on inspection.

Over emphasis on examination results as a measure of quality must be shifted to the rear and efforts be made to make the learning processes as appealing as possible to retain the students. It must be noted that the fear of failure and the tension that goes with the examinations may drive students away from school, leading to undesirable waste of resources and failure by the school in “creating the best quality students.”

4. End the practice of awarding business on the basis of price tag alone.

It is these kind of experiences that will enhance a lasting relationship between school and students and lead to quality results.

5. Improve constantly and for ever the system of production and service.

In the case of Rural Day Secondary Schools in Zimbabwe this should be easy as students come from local “feeder schools” within walking distance, and managed by the same groups of parents.

6. Institute training.

The pursuit for quality should not be a one-off event, rather it must be a continuous effort undertaken by all in the organisation.

7. Adopt and institute leadership.

Developing countries are generally characterised by poorly qualified manpower. It therefore becomes imperative for the system to identify emerging staff needs as they grapple with the disadvantaged environment, then work out appropriate training programmes for smooth adaptation and professional growth.

8. Drive out fear.

Since quality does not necessarily imply high cost, schools can still realise quality from whatever available resources may be available. All that is needed is that staff be trained to be resourceful and creative and make the best out of their environment.

9. Break down barriers between staff areas.

School authorities should work hard to develop a conducive, open climate that will instill a sense of security among both students and staff.

10. Eliminate slogans, exhortations, and targets for the workforce.

Exhortations create conflict and, at any rate, a larger proportion of problems are attributable to faulty systems rather than individuals.

11. (a) Eliminate numerical quotas for the workforce.

(b) Eliminate numerical goals for people in management.

12. Remove barriers that rob people of pride of workmanship.

13. Encourage education and self-development for everyone.

14. Take action to accomplish the transformation.

The school must be a learning organisation for students, teachers and the community.

Over the years Deming's fourteen points have been adapted and modified by other scholars. For instance, Huxtable (1995:12-13) adds that in adopting a new philosophy (point 2) there is need to shed off all unquality values and that statistical evidence should substitute inspection to build up quality. He (1995:13) further suggests that in taking action to accomplish the transformation there is need to create a structure in top management that will push everybody on the rest of the thirteen points. In short, the rationale for this approach is that if quality is improved costs will go down due to less rework, fewer mistakes, fewer delays and better use of time and materials. This in turn leads to improved profits and a wider market that ensures the organisation stays in business (Deming 1986:3). Apart from propounding the fourteen points on TQM, Deming also popularised and expanded the applications of the Shewhart cycle.

2.4.8 Shewhart cycle

The commitment of TQM to continuous improvement presents a circular, rather than linear approach to analysing work processes, and this is the approach advocated by Shewhart. Creech (1994:521) and Morehouse (1996:34) point out that Shewhart came up with a four-phase cyclic approach to quality improvement. The phases are: Plan-Do-Check-Act. From an analysis of the entire process a single aspect is isolated for improvement. A plan of how to improve that aspect is drawn up, and once the plan is clarified and accepted it is implemented on a small scale. The effects of implementing

the plan are scrutinised closely. Depending on the results action is then taken to implement the plan on a larger scale, refine the plan, or discard it for a new one.

Wardsworth, *et al* (2002:258); Creech (1994:201) and Morehouse (1996:34) all concur that the Shewhart Cycle aims to improve both the process and the product, and works well if there is consensus on the need to improve quality. Deming (1986:88-89) says studying the results of plan implementation leads to improvement at any stage, and subsequently to greater satisfaction of the customer for that stage. Deming (1986:89) further argues that any stage of the Shewhart cycle may need guidance of statistical methodology for economy, speed and accuracy of measurement. This enhances the objectivity of the model. Morehouse (1996:35) points out that Deming modified the Shewhart cycle to Plan-Do-Study-Act in 1990. In Japan it is called the Deming cycle, and either term is used in the West.

In education this model can be used to analyse the internal efficiency of the school system. For instance, student achievement; curriculum design; and student retention can be analysed using this approach. The models reviewed assist in understanding the nature of quality, but it is also important to understand why organisations like schools should pursue a quality path.

2.5 WHY QUALITY OF EDUCATION?

In recent years the debate on quality of education has gained a lot of momentum, as corroborated by Steyn's (2001:17) assertion that the need for quality education is the single most important issue today and quality makes the difference between success and failure. There is a wide gamut of reasons for this development and these are discussed in turn below.

2.5.1 Government accountability

Education has increasingly become the responsibility of the state, rather than private individuals and private organisations. This increased government involvement in

education comes at a time when government resources for all social services are diminishing, thus placing a lot more accountability on education. While hitherto education has largely been viewed as a social service, it is now assuming a business outlook and resources put to it are viewed as investment whose payoffs must be continuously assessed. There are costs and benefits involved for both society and the individual. Quality analysis is therefore closely tied up with cost benefit analysis. This view is held by Goddard and Leask (1992:46) who say, “There is considerable pressure on the education service to be more publicly accountable and for there to be open discussion about education”.

2.5.2 The quality-quantity dilemma

Grisay and Mahlck (1991:6) say, “Any attempt to open up the system, be it universalisation of primary education or ‘going comprehensive’ at lower secondary education seems inevitably to lead to the belief that mass education will be achieved at the price of lower quality.” If this assumption holds then expanding the education system would be synonymous with planned waste of resources. Rural Day Secondary Schools in Zimbabwe were established to improve access to education for rural populations soon after independence. Hence it is vital that the quality of education offered in these schools is analysed to ensure that the expansion is not a waste of resources, and that both the customers and the nation at large gain satisfaction from this education system. Grisay and Mahlck (1991:7) argue that the large-scale expansion of secondary education in developing countries has failed to satisfy social demand, leading to an increase in the number of private schools. Current debate in many countries has thus focused on the comparability of learning conditions and quality of education between private and state schools.

It therefore becomes imperative to visit the issue of quality of education in state schools continually to try and ensure they move closer to meeting the social demand, and also out-compete, or at least compete favourably against private schools. Private schools are generally expensive and there is no guarantee that they will pursue educational goals that

are consistent with the government's vision. It therefore is desirable that state schools dominate and lead in the provision of quality education to ensure increased participation, even by economically vulnerable groups.

2.5.3 Improving access to education

Ross (2002:8), discussing how developing countries with limited resources can both improve the quality of education and expand access in their efforts to attain the goals of the Dakar Forum, says Ministries of Education will have to develop effective monitoring and evaluation systems that can be used to answer a very important question: Can nations, especially those with limited resources, improve the quality of education, and in particular schooling conditions and student learning outcomes, at the same time as they are expanding access to education through increased participation? The Dakar Declaration seeks to achieve Education for All (EFA) by 2015 and requires all nations not only to expand participation in education but also strive "...to improve all aspects of the quality of education and ensure excellence so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy, and life skills," (Ross 2002:8).

The letter and spirit of the Dakar Declaration makes it imperative for nations to continue not only to debate, but also measure the quality of education being offered. In the context of this study it is critical to analyse the internal efficiency of the Rural Day Secondary Schools in Zimbabwe to ensure the ideals of the Dakar Declaration are met. If the system is fraught with high dropout rates, low survival rates, high repetition rates and low pass rates it will almost be impossible to realise literacy, numeracy and life skills for the students. This results in a waste of limited resources and the fee-paying parents will be short changed. Thus measuring the efficiency of the education system becomes an integral part of the management process.

2.5.4 Value for parents' money

Kanji (1995:431) has this to say about the need to measure the quality of education:

With spiraling tuitions, public concern for accountability and responsibility, operating expenses that seemingly defy all traditional containment efforts, and an increasingly competitive market place, a number of college and university leaders and accrediting associations are asking the question, “ Is there a better way to manage higher education?”

Kanji (1995:432) proceeds to say American parents ask of education, “What exactly are we paying for?” as for them quality of education equals children’s ability to secure well-paying jobs. These views can be applied even to the secondary education level as the cost of providing secondary education is becoming prohibitive. Not only parents, but government too wants to see value for money in education. Thus it becomes necessary to review the quality of education in order to convince all concerned that the programme is worth pursuing. In Zimbabwe, by and large, success is measured by the type of work that one obtains after secondary education, as five “O” level passes are the gateway to further training and/ or decent employment. If the internal efficiency of the school system is low (high dropout rates; low pass rates; low survival rates and high repetition rates), the students cannot achieve the gateway five “O” level passes and ultimately the well-paying jobs. Thus to answer the question, what are parents really paying for, confidently and truthfully, it is necessary to review constantly the quality of education being offered.

2.5.5 Economic development

Education is not offered in a vacuum, rather in the context of changing paradigms in economy, technology and politics. Education is viewed as a critical determinant of economic development. Thus it is important to re-align continually the quality of education to foster economic development that will improve the quality of the life for the nation. The economy dictates what skills are needed for the available jobs and it is important that the quality of education successfully equips students with these skills. If students fail they will remain unemployed, while the economy experiences manpower

shortages. Bray, *et al* (1986:40) argue that education equips individuals with skills for self-employment and can improve the employment situation. Research findings show that basic education is likely to improve agricultural productivity by creating awareness of new techniques, and the capacity to learn from situations.

Bray, *et al* (1986:41) go on to cite a study conducted by the World Bank to compare productivity levels of unschooled farmers and those farmers with a four-year basic education. The results showed an average difference of 8.1% productivity in favour of the ‘schooled’ farmers, implying that education improves productivity. This observation makes it necessary to steer the quality of education continuously towards ensuring higher productivity especially in a country like Zimbabwe with an agro-driven economy. However, Miller (2001:3) argues that an education that takes place within the context of a work situation results in a narrower education that focuses on practical skills to the detriment of a broader academic education. There is a danger that workplace competencies may be elevated above essential academic knowledge. It must also be borne in mind that education is not solely for employment, but employment is just one of many benefits that derive from education. A more holistic view of quality education would be one that tries to balance practical skills with academic knowledge.

However, even if education is believed to enhance opportunities for employment, Books (1996:3) observes that, rural schools, “...are under funded and provide a low-quality education to those who end up as cheap labour.” Thus, to improve the economic status of rural people, and raise them above the level of being mere tools of production it is necessary to assess continually the quality of education they receive. A low internal efficiency of the school system will ensure that the rural people are excluded from the critical decisions and operations that drive the economy. Such a type of education cannot be said to have prepared the students for the word of work.

2.5.6 Technological pressure

The world over is experiencing rapid technological development, thus the quality of education needs to be continually reviewed to ensure schools adapt to the demands of new technology. If schools fail to adapt their graduates to fit in with the demands of changing technology, the graduates will be irrelevant to the economy and society. One of the characteristics of the quality of education is that, “skills and values acquired are relevant to human and environmental conditions and needs” (Grisay & Malhck 1991:3). Thus, unless the quality of education is perpetually revisited, there is a high risk of producing technologically irrelevant and redundant graduates.

2.5.7 Political pressure

Education is a function of the political order of the day, and can actually be used as a political tool, as shown by educational pronouncements in the manifestos of political parties. The formulation of Education Acts is a purely political process and these Acts portray the visions of the government of the day. But the political landscape is rapidly changing, especially in developing countries so it becomes imperative to check constantly that the quality of education is in line with the political direction being followed by the nation. There is also mounting pressure from legislators and politicians for education to justify expenditure. Education is thus a tool for political unification and communication. Bray, *et al* (1986:25) say, “Finally educational projects often attempt to reduce regional imbalances, which frequently correspond to imbalances between ethnic and religious groups.” Rural Day Secondary Schools in Zimbabwe attempt to reduce rural–urban imbalances and ensure that children from all provinces have access to secondary education, hence it is important to assess their internal efficiency to ascertain if they are moving towards bridging the rural–urban, and inter-provincial gaps, in terms of skills development.

2.5.8 Globalisation

Globalisation is yet another feature that exerts pressure to intensify the debate on quality of education. Ross (2002:7) gives an apt summary of this when she says, “The quest for

quality education is today inextricably bound up with the processes and impact of globalisation.” Hayward and Steyn (2001:108) support the same view when they argue that schools need to improve the quality of education if they are to be significant players in the world’s economic arena. The education system currently competes for resources and students even beyond the national boundaries. Not only that, the graduates from the school system must now compete for a job in a global, rather than just national market. The global market is highly volatile and dynamic, and if school graduates are to compete meaningfully in it, it goes without saying that the quality of education has to be continuously re-engineered and rejuvenated at high speed. If not, the graduates will be losers in the global market for jobs.

According to Ross (2002:7), as the economies of nations compete for strong positions within a competitive global market place, many governments have become increasingly inclined to view the relative performance of their education systems as a way of enhancing national economic development. This trend, coupled with the enormous expenditures that are devoted to education, has precipitated demands by governments and the public for higher levels of scrutiny and accountability concerning the quality of education.

Thus, many nations are pursuing quality of education through such organisations as International Association for the Evaluation of Educational Achievement; Organisation for Economic Cooperation and Development (OECD) and Southern Africa Consortium for Monitoring Educational Quality (SACMEQ). This ensures that planners and policy makers exchange vital information for shaping the quality of education. The information exchange helps to monitor current trends in order to plan for the future.

2.5.9 Future allocation of resources

If education is to be planned in a way that will ensure quality, there is need to think consciously of how resources will be allocated in good time. Peano (2002:8) argues that monitoring the quality of education determines how future resources will be allocated,

and posits that recently there has been marked diversification in both the types of education provided, and the way schools are funded and managed. The advent of privately financed schools has ushered in variations in the operation and management of educational institutions, and analysing the experiences from these changes provides important input for the supply, organisation and efficiency of education.

Rural Day Secondary Schools in Zimbabwe are para-state, as government pays them a grant and teachers' salaries, while parents under School Development Committees finance the development of infrastructure and the costs of the day-to-day running of the schools. Peano's (2002:8) rationale for monitoring the quality of education therefore fits in very well with these schools. Information provided would not only inform how resources are mobilised, but also how they are managed, which directly determines the internal efficiency of the school system. Ross (2002:8) also subscribes to this view when she says, "Expanding access to education and improving quality and efficiency call for mobilisation and management of enormous human, material and financial resources."

2.5.10 Anticipating customer needs

Deming (1986:5) postulates that quality should be aimed at the needs of the customer, present and future. This concept is adapted to educational practice by Peano (2002:8) who says it is necessary to review the quality of education in order to anticipate the needs of the customers, since quality is underpinned in satisfying customer needs. He states, "The essence of planning is to use data from the present to project demands in the future, and act now to meet them." This is made imperative by the fact that customer needs and tastes change rapidly. In support of this view Greenwood and Gaunt (1994:26) say, "Customers have become demanding and they are not willing to accept substandard products in any market place, including education." Continually interrogating the quality of education thus ensures that the planner has enough data to prepare and offer an up to standard product. Setting, pursuing and monitoring standards is an imperative, rather than an alternative in educational management.

2.5.11 The four quality imperatives

Sallis (1996:4) points out four imperatives why quality should continue to be an issue for concern. These are: the moral imperative; the professional imperative; the competitive imperative and the accountability imperative.

2.5.11.1 The moral imperative

The moral imperative seeks to link educational provision constantly with the dictates of the customers who are students; parents; government and the community, all of whom require the best quality of the education service. West-Burnham (1992:6) argues that anything less than total quality cannot be perceived as being appropriate or acceptable for the education of children. Quality is relative and, a “moving target” and has to be continually analysed if it is to remain quality and total quality at any given time and locale.

2.5.11.2 The professional imperative

The professional imperative is based on the assertion that educators have a duty to provide high standards of tuition to students. Thus, scrutinising the quality of education yields data on the level of professionalism and commitment of educators and administrators. Any shortcomings detected can be remedied so that the down stream effect continues to satisfy the ultimate customer. For example, the redress could be in the form of training teachers and school administrators to institute best practice.

2.5.11.3 The competitive imperative

The competitive imperative is premised on the notion that competition in education is real. Schools compete for students, but also compete for parents’ limited money with other household demands like food and shelter. A school that fails to position itself in good stead for competition will experience a drop in its enrolments, which in turn

threatens staff and the viability of the school itself. It thus becomes important that the school always improves its quality in order to stay competitive. In poor communities schools may lose students to better-equipped schools; premature employment; premature pregnancies and marriages, as well as cross-border employment. To curb such trends it is vital to continually review the quality of education constantly and strengthen the retention capacity of the school system. TQM may be used to redress these trends, as it will continually try to identify those attributes that will keep the students at school for the stipulated time.

2.5.11.4 The accountability imperative

The accountability imperative links the school system with its constituent groups like communities. Schools have to meet the political demands of education and demonstrate the high standards of their graduates if they are to stay accountable. Sallis (1996:8) says, “TQM supports the accountability imperative by providing objective and measurable outcomes of educational processes and providing mechanisms for improvement of those outcomes.”

The reasons for debating and analysing the quality of education are in no way exhaustive. However, suffice to say, they generally hinge on accounting for resources; satisfying customers, keeping education aligned to economic and political development, as well as ensuring that school systems and their products remain competitive nationally and globally. The quality debate must be driven by measurable data from performance indicators such as those that constitute internal efficiency to aid responsive planning. The absence of quality constitutes a heavy cost on the organisation.

2.6 THE COSTS OF QUALITY

Ruskin (1992:1) says, “Quality is never an accident. It is always the result of intelligent effort. It is the will to produce a superior thing.” Like any other planned programme it should be apparent that quality has some costs. It is always critical to analyse the costs of

achieving quality, especially in a scenario where resources are scarce, as in the case of developing countries. If this is not done expeditiously, attempts at instituting quality may actually lead to inefficiency. If the cost of instituting quality in the education system, and indeed any other venture, exceeds the cost accruing from lack of quality then it is more efficient to do without instituting the quality. According to Greenwood and Gaunt (1994:82), analysing of quality costs is a significant management tool for assessing and monitoring the overall effectiveness of the management of quality and determining problem areas and action priorities.

The thrust should be to get it right the first time, and always, as this yields the minimum cost, or at best allows quality to pay for itself. Failing to get it right the first time yields costs in time, money, effort, resources and wear and tear. But more damagingly, it may hurt customer confidence and loyalty. The cost of keeping an old customer is far less than the cost of running after a new customer, or recalling a customer who has walked out on the enterprise.

There are basically three types of quality costs according to Greenwood and Gaunt (1994:82). These are: failure costs; appraisal costs and prevention costs. Failure costs fall into internal failure costs and external failure costs. Internal failure costs arise when the results of work fail to reach certain standards and are detected before transfer to the customer. They also include waste, which are activities associated with doing unnecessary work as a result of errors, poor organisation and use of wrong materials. Rework or rectification refers to correction of defective products to meet required standards, while re-inspection is the re-examination of work that has been rectified. Failure analysis refers to activities required to establish the causes of failure in the first instance. In the school system internal failure costs would arise from high repetition rates which is equal to re-doing the job; recalling dropouts to the system and trying to determine why dropout rates and failure rates are high; in-service courses for teachers, replacing inappropriate resources such as textbooks and rescheduling lessons.

External costs of failure manifest themselves through complaints, reduced number of applicants, and bad publicity. It is obvious that a school characterised by high dropout rates, low pass rates, and low survival rates will be shunned by students and parents who want to take their education seriously. The school will simply lose out in competition on the market. The internal efficiency of a school system actually does a lot to increase or reduce its external costs of failure, hence the planners must keep track of the internal efficiency. Internal and external failure costs combine to give the price of doing it wrong.

Appraisal costs are those costs incurred to determine conformance with set quality standards. These include inspection checks, quality audits (checking if the quality system is working well), and vendor ratings. All these are costs of checking if it is right. They could be avoided by doing it right, in the first place and always. In respect of the internal efficiency of Rural Day Secondary Schools, this could be in the form of analysing pass rates to check how they compare with national targets.

Finally, prevention costs refer to the costs of activities that prevent costs (through errors) from occurring. They include planning, training and quality awareness initiatives. Processes can be improved by using, among other techniques, benchmarking; process flow-charting; correlations and cause and effect analyses that will help identify major causes of problems and the priorities. Pareto analysis, which calls for allocation of weights to causes of defects can be used, and the 80/20 hypothesis which says 80% of the problems is accounted for by 20% of the causes can be applied. This implies that correcting a small chunk of the causes will correct a large chunk of the problems, and thus save costs. In the light of this study this would entail identifying and rectifying the causes of low pass rates, high dropout rates, low survival rates and high wastage ratios.

Whatever cost is incurred in preventing defects before they occur is worth it, as the cost of rectifying is likely to be higher, not only in monetary terms, but also in a number of unquantifiable ways. If this is done effectively, quality will largely pay for itself, but only if the indicators of quality are known and well understood.

2.7 INDICATORS OF QUALITY OF EDUCATION

From the definitions of quality of education reviewed earlier in this study it is clear that not just one indicator is a guarantee for quality. This view is supported by Deming (1986:168) when he argues that measuring quality is not easy, as what satisfies the customer constantly changes, and that the quality of any product or service has many scales. There is a range of indicators which individually are necessary, but are not sufficient indications of the presence of the quality of education. Thus, quality of education becomes a matter of degree of the presence of the indicators, rather than an absolute, or discrete variable, which is either here or not there. This assertion is consistent with Yin's (1996:58) observation that, "Evaluation of school performance must focus on multi-level and multi-facet indicators including inputs, process, and outputs of schooling in addition to academic development of students."

Natarajan (1993:11) gives nine indicators of educational development. These are:

1. Literacy percentage;
2. Dropout and retention rates;
3. Enrolment of children in various age groups;
4. Contribution to the world of knowledge;
5. Emergence of eminent personalities;
6. Social relevance and secular character of education;
7. Technical and scientific manpower;
8. System of examinations and certification; and
9. Morale of the teaching profession.

Only three of these indicators, that is, (2), (3) and (8) concern internal efficiency, but the rest are a function of internal efficiency. For instance, low promotion rates, high repetition rates, high dropout rates and low pass rates will definitely negatively impact on literacy percentage, contribution by graduates to world knowledge, emergence of eminent personalities and morale of the teaching profession.

Moyo and Mubengegwi (1995:62-74) list quantitative indicators of quality of education, among them:

- Growth rate;
- Promotion rates;
- Access to schooling (age specific admission ratios; and gross admission ratios);
- Transition rates;
- Enrolment ratio (gross enrolment ratio and net enrolment ratio);
- Internal efficiency (survival rate; average study time per graduate; wastage ratio);
- Teacher supply (qualifications and utilisation rates of teachers);
- School buildings and utilisation rates of classrooms;
- Conditions of learning (supply of furniture and textbooks); and
- Pass rates.

There is some overlap between the two lists of indicators of quality of education by Natarajan (1993:11) and Moyo and Mubengegwi (1995: 62-74) as shown in the aspects of dropout rates and enrolment ratios. However, the former tends to focus mainly on qualitative aspects such as social relevance and morale of teaching staff, while the later stresses numerical indicators exclusively. These numerical indicators largely focus on the in-school processes rather than the wider education system.

The European Commission: Education (25 November 1999:1) gives broad indicators of the quality of education which are success and transition; completion of upper secondary education and participation in tertiary education. It says, "...increasing or decreasing rates are seen as important measures of the quality of the education system." This observation is consistent with the thrust of the indicators raised by Moyo and Mubengegwi (1995:62-74). Dropouts adversely affect the other indicators and result in people without qualifications that meet market requirements, and are unemployable. The European Commission: Education (25 November 1999:1) further says, "The ability of an education system to minimise the number of dropouts is a strong indication of its

efficiency both in dealing with school failure and in responding to the needs and challenges of the labour market.”

The significance of numerical indicators is also supported by the European Trade Union Committee on Education General Assembly 2001 (June 2000:1), which identifies four indicators of quality of education as follows:

1. Attainment (in mathematics; science, reading, foreign languages);
2. Success and transition (dropout rates; participation rates in tertiary education, completion of upper secondary education);
3. Monitoring school education (parental participation, evaluation and steering school education); and
4. Resources and structures (educational expenditure per student; education and training for teachers; participation in pre-primary education, equipment and infrastructure).

Further, DFID (2001:1) discussing the Vietnamese education system identifies four indicators of quality of education, which are:

1. Enrolment ratios;
2. Age specific enrolment rates;
3. Completion rates; and
4. Learning achievements.

The DFID (2001:1) position is also supported by Liston (1999:63) who sees student intake and progress as a way of monitoring quality in educational environments, and should involve annual student enrolment rates, attrition rates and course completion rates. The panoply of authors visited generally subscribe to the use of numerical indicators in measuring the quality of education. It is, to some extent, through the influence of this overwhelming concurrence on the significance of quantitative analysis in quality management that this study focused on the internal efficiency of Rural Day Secondary

Schools in Zimbabwe. The study hoped to reveal the patterns of students in completing the prescribed study course.

Completion rates for upper secondary education are important indications of a successful education system. Completion of upper secondary education is also considered the minimum qualification for successful entry into the labour market, and allows access to higher education. Cheng (1997:1) corroborates this saying, “The A-Level examination is a crucial benchmark in our education system and serves as a gate-keeping device for entry to the universities.” He (1997:1) further argues that the reputation of junior colleges hinges very much on the student’s performance in this examination. This can be said of secondary schools in Zimbabwe.

Participation in higher education is necessary for one to cope with demands of the global environment. Even for local markets it is only tertiary education that offers professional training to meet manpower needs.

The issue of internal efficiency is central to these indicators. The list of indicators of the quality of education is not exhaustive, but those applicable must be closely linked to the articulated educational objectives and the prevailing context. By and large the indicators of the quality of education reviewed in this study revolve around use of information for management, access to education, reducing wastage, pass rates, supply of resources and the utility of education. Most of the indicators allude to the concept of internal efficiency.

2.8 INTERNAL EFFICIENCY OF THE SCHOOL SYSTEM

Educational provision absorbs considerable scarce resources that must be properly managed to benefit the customers. Natarajan (1993:47) says, “Efficient management of resources is called for to achieve the stated goals within a stipulated time”. This implies that the quality of education is a function of the efficient management of educational inputs.

IIEP (1989:7) views efficiency as the optimal relationship between inputs and outputs. Efficiency is high if a given quantity of output is obtained with a minimum of inputs, or conversely, if a given quantity of inputs yield maximum outputs. Efficiency can be measured using some indicators. Natarajan (1993:47) lists the following as indicators of efficiency of an institution:

- Percentage of successful candidates with distinction;
- Unit costs at constant prices over a period of time;
- Output of distinguished scholars;
- Achievement in co-curricular activities;
- Rate of wastage and stagnation; and
- Employability of students after course completion.

Because this study concerned internal efficiency of schools, it analysed such indicators as achievement (pass rates) and wastage through dropouts and repetition, but left out those indicators not specifically directed at internal efficiency. Efficiency in education can be broken into internal efficiency and external efficiency.

Internal efficiency (or production efficiency, in the economist's jargon) is defined by McMahon (1993:22) as the efficiency with which learning and other educational outcomes are 'produced' in schools. Internal efficiency seeks to address concerns of wastage within the process, while external efficiency relates to how well the graduates contribute to economic development such that resources invested in their education do not constitute a waste. A related view of the concept of efficiency is upheld by Deming (1986:183) when he writes that inefficiency in a service organisation (just like in manufacturing) raises prices to the consumer and lowers his standard of living. The thrust of this study was on the internal efficiency of Rural Day Secondary Schools in Zimbabwe. The study of internal efficiency helps to use resources to best advantage and address inequalities. If the education system is inefficient, the price of education will be out of reach for most potential students, and the quality of their lives and those of their communities will be compromised.

In the view of Moyo and Mubengegwi (1995:66-67) in measuring access to schooling, educational planners aim to get as many children to school as the policy stipulates, as well as knowing how many of the children remain at school and complete all the educational cycles that they are meant to go through. In other words, they would like to know the retention capacity of the system for a cohort in the school system. They also would like to know how wasteful the system is in terms of number of years students invest in school and the number of graduates that it produces. A study of these processes is called the internal efficiency of the school system. The use of numerical measurements for this analysis is, supported by McMahon (1993:28) who argues that, “Efficiency is best measured using quantitative indices.” It can thus be concluded that internal efficiency is the degree to which wastage of educational resources is reduced through an improved school retention capacity, and avoidance of rework that accrues from repetition and failure of students.

The internal efficiency of the school system is measured through the student flow analysis method, as explained in IIEP (2000:14). It analyses mainly the three things that happen once a cohort enters the school cycle:

1. Students may be promoted to the next grade;
2. Students may repeat a grade; and
3. Students may dropout of the school system completely.

These data can further be treated to yield wastage ratios. In the ensuing paragraph various indicators of internal efficiency are looked at.

2.8.1 Transition rate

According to IIEP (1989:6) this refers to the proportion of students moving from one education cycle to the next higher cycle. In this study this refers to the proportion of students in the final year of primary schooling in a given year, who proceed to the first

year of secondary schooling in the subsequent year. In Zimbabwe primary education is Grade 1 to Grade 7, while secondary education is Form 1 to Form 6. Thus the proportion of students in Grade 7 who move to Form 1 in the subsequent year is the transition rate for that cohort. It is a way of tracking what happens to students successfully completing a given cycle of education, and the formula is:

$$\text{Transition rate} = \frac{\text{Form 1 enrolment in year } t + 1}{\text{Grade 7 enrolment in year } t} \times 100$$

Where: year t is the year in which the students are in the final year of primary education, and year t+1 is the year in which those students are in the first year of secondary education.

For instance, if the total number of students in Grade 7 in 2002 is 1000, and the total number of students in Form 1 in 2003 is 860: the transition rate = $(860/1000) \times 100 = 86\%$.

2.8.2 Repetition rate

This, according to IIEP (1989:6), refers to the proportion of students in a grade, who for various reasons repeat the same level the following year.

$$\text{Repetition rate} = \frac{\text{No of repeaters in level } g \text{ in year } t + 1}{\text{Total number of students in level } g \text{ in year } t} \times 100$$

According to Bray, *et al* (1986:62) repetition constitutes inefficiency as repeaters occupy places, which could have been taken up by other students, and use resources more than once before progressing. This also hinders efforts to educate larger numbers of students and the resultant democratisation of opportunities. This view is heavily criticised by IIEP (2000:22), which argues that there may be value in repetition, after all, as students are likely to grasp useful knowledge during repetition. Thus repetition may only be

accurately viewed as a waste if the repeaters do not get any worthwhile knowledge in the process, which is very unlikely. There is also no guarantee that students who do not repeat any form will ultimately perform better academically, and in real life than those who repeat some form(s).

2.8.3 Dropout rate

This, according to IIEP (1989: 6), is the proportion of students who permanently leave school before completing a prescribed cycle or level. Bray, *et al* (1986:62) contend that dropout rates tend to be higher among students from low socio-economic backgrounds and in rural areas. This study was confined to rural schools whose communities are economically backward, and it sought to verify this tendency. It is worth considering that dropouts will have learnt something valuable before leaving school so to treat them as a complete wastage has the effect of inflating inefficiency levels, thus causing unnecessary panic. IIEP (2000:22) points out that failure to attach some output value to the years that dropouts spend in school ignores recent research on the threshold of literacy retention and this is particularly unrealistic for secondary education.

2.8.4 Survival rate

Moyo and Mubengegwi (1995:68) say, “The survival rate is the proportion of students admitted in an educational cycle and will eventually complete that cycle. It is a measure of the capacity of the retention of the cycle.” This is irrespective of whether the students have repeated a level or not. It can be measured from form to form using a cohort flow diagram. The total number of students from a cohort finally promoted to the next form, expressed as a proportion of the total cohort gives the survival rate.

2.8.5 Study time per graduate

According to IIEP (1995:69), this indicator focuses on the number of years it takes a graduate to complete a cycle. A hypothetical case may illustrate this better:

If 112 students take 4 years to complete a four-year secondary school cycle; 130 take 5 years and 98 take 6 years, what is the average study time per graduate?

$$\begin{aligned}\text{Average study time per graduate} &= \frac{(112 \times 4) + (130 \times 5) + (98 \times 6)}{340} \\ &= 4.96 \text{ years,}\end{aligned}$$

where: $112 \times 4 = 448$ student years spent by 112 students completing in four years

$130 \times 5 = 650$ student years spent by 130 students completing in five years

$98 \times 6 = 588$ student years spent by 98 students completing in six years.

This indicator is above the ideal of four years, implying that students are remaining in school longer than planned. (340 is the total number of students who complete the cycle, albeit at different times).

2.8.6 Pass rate

This is the proportion of students who attain at least some pre-determined standard of performance at the end of a cycle. For purposes of this study a pass is a grade C or better at Ordinary Level. A full-certificate is defined as five subjects marked C or better, including English Language. Thus pass rate in this context refers to the proportion of students who obtain at least five subjects marked C or better, including English Language in the “O” Level examinations.

2.8.7 Wastage ratio

The wastage ratio as explained by Moyo and Mubengegwi (1995:69) is a kind of ‘composite’ indicator, which looks at the global input and output relationship in terms of student years spent by a cohort in completing study course, compared with those that successfully complete the course. It, therefore, simply means that the wastage ratio is really an input/output ratio.

Moreover at this juncture it is important to understand the concept of a student year. IIEP (1989:12) says, “The student year represents a convenient non-monetary way of measuring educational inputs. One student year stands for all resources spent to keep one student in school for one year.” These inputs are resources such as buildings, teachers, textbooks, time, stationery, furniture and equipment. The quantity of these resources rises not only with the number of students, but also with the number of years it takes a student to complete the cycle in which he/she is enrolled. For instance, if 1000 students take four years to complete a four year secondary school cycle, they have spent $4 \times 1000 = 4000$ student years.

$$\text{Wastage ratio} = \frac{\text{Actual inputs/output ratio}}{\text{Ideal inputs/output ratio}}$$

The indicator can be illustrated by looking at the following example: If 1000 students complete Form 4 as follows: 450 in four years; 200 in five years and 350 in six years, compute the wastage ratio.

The wastage ratio is computed as follows:

$$\text{Actual inputs/output ratio} = \frac{(450 \times 4) + (200 \times 5) + (350 \times 6)}{1000} = 4.9 \text{ years}$$

Explanation:

450x4 gives 1800 student years taken by the students who completed in four years

200x5 gives 1000 student years taken by the students who completed in five years

350x6 gives 2100 student years taken by the students who completed in six years

The total number of student years is thus $(1800+1000+2100) = 49100$

Since there are 1000 students who completed the student years are divided by 1000 to get the actual inputs/output ratio. This gives $4900 / 1000 = 4.9$ years.

If all the students had completed in four years, the number of student years would be $4 \times 1000 = 4000$. Hence the ideal inputs/output ratio would be $4000/1000 = 4$ years.

$$\begin{aligned}\text{Wastage ratio} &= \frac{\text{Actual inputs/output ratio}}{\text{Ideal inputs/output ratio}} = \frac{4.9 \text{ years}}{4 \text{ years}} \\ &= 1,225\end{aligned}$$

This implies that the system is producing graduates at 1,225 times the ideal cost, and this is inefficient.

This section will limit itself to only these indicators. There is a multiplicity of other indicators that can be analysed. It must be borne in mind that analysing the internal efficiency of the school system does not on its own guarantee quality of education, rather it yields information that guides decision making in planning education qualitatively. IIEP (2000:20) also observes the following limitations of the concept of internal efficiency:

1. The student-year is a non-monetary measure that does not yield very useful data for educational cost analysis;
2. Equating efficiency to completion may be misleading as learners may go through the cycle without gaining any worthwhile skills; and
3. Internal efficiency is not a guarantee for external efficiency.

It is thus the position of this review that internal efficiency is a necessary but not sufficient condition in ascertaining the quality of an education system. It must be applied alongside other measures, quantitative and non-quantitative, to overcome a variety of barriers to quality of education.

2.9 BARRIERS TO QUALITY OF EDUCATION

The quest for quality is not a smooth path, nor is it a straight forward one. To the contrary, there are several barriers that the quality planner in education must overcome. Granted removing these barriers completely may not be feasible, but an effort must be made to minimise their adverse impact on the school system. If no effort is made to control for the effect of these barriers, the internal efficiency of the school system will be very low resulting in a waste of already-scarce resources. Hence it is important that these barriers are clearly understood before they are tackled.

UNICEF (2002:2) identifies five categories of barriers to quality of education. These are: household barriers; policy barriers; infrastructure barriers; community beliefs and practices, and educational barriers. Each of these barriers has a high potential of compromising the internal efficiency of the school system and thus eroding the quality of education offered. Apart from these categorised barriers there is a wide range of conditions for failure. These conditions either act as barriers in themselves or they promote adverse effects of the barriers.

2.9.1 Household barriers

Household barriers include family resource-levels, and consist of direct costs and indirect costs. Direct costs refer to tuition fees, cost of books and stationery, cost of uniforms and other clothing. Indirect costs relate to family values, domestic work, household chores, disability, and poverty. Given low levels of literacy in rural areas, appreciating government policies on access to education may still be low as parents and families hold on to traditionally esteemed values that do not prioritise schooling. Bray, *et al* (1986:61) say, “ The chief reason why dropout rates are relatively high among lower income groups is that pupils cannot afford to remain in school. Even if schools are nominally free there are usually uniform costs and textbook costs.”

2.9.2 Policy barriers

Policy barriers also affect the quality of education. The first policy issue is insufficient national budget to enable the crafting and implementation of whatever policies may be deemed fit for the development of the quality of education. Developing countries are characterised by shortage of resources. This view is aptly observed by Natarajan (1993:12) when he says, “Under developed countries provide less educational opportunities to rural children.” This study endeavoured to establish if similar trends apply in the Zimbabwe situation.

Lack of policy on how to deal with dropouts and pregnancies for girls also stifles quality efforts in the school. In the final analysis it is cheaper to get the students who would have dropped out of school back on course, than let them stay out for good. If they stay out of school for good they become a permanent loss and a perennial burden to the economy.

The absence of enforced child labour laws may also affect the internal efficiency of schools. Some students may leave school in order to labour for own families, relatives or more affluent neighbours. Some may even migrate to other places within, and outside the country in search of jobs, even if they are under age. Coupled with this is the absence of laws to enforce compulsory education.

Policies to do with curriculum formulation also act as a barrier. It can be argued that even in those countries where access to education has significantly been expanded, the curriculum is still largely a mirror image of the pre-independence curriculum. Natarajan (1993:12) says, “Education is not related to real life situations. It is not an equaliser, but acts as a stabiliser and promoter of social inequalities. Education is not linked to productivity and is not backed by a sound philosophy.” This tends to reduce the retention capacity of the school system leading to a lot of waste. Even those who stay through the school programme are not worthwhile contributors to national development, afterwards.

2.9.3 Infrastructure barriers

The third barrier is infrastructure-barriers. Rural areas are sparsely populated forcing schools to be sited far apart from each other. For instance, in Zimbabwe Rural Day Secondary Schools are supposed to be built about eleven kilometres apart, forcing students to walk a long way to school. The long distance may discourage students, and encourage truancy that may result in dropouts. The fatigue that comes with the distance adversely affects the academic performance of students leading to low pass rates. Poor school facilities also compromise the quality of education, especially in rural areas where classrooms, laboratories and libraries are scarce.

2.9.4 Community beliefs and practices

Community beliefs and practices also act as barriers to quality of education. These can manifest themselves in the form of gender discrimination, where in the face of limited resources female students are sacrificed. There are still pockets of ethnic groups in Zimbabwe that prefer to remain excluded from such developmental projects as education as they feel this spoils their culture. These include the Tonga from Binga, the Khoisan from Plumtree and the Xhosa from Mbembesi. Some of these districts fall within the delimitations of this study. Given the low educational levels of the rural communities, the communities are bound to have a poor knowledge of social and private benefits of education. Thus, students may not see school as a worthwhile place to spend time at, and withdraw prematurely.

2.9.5 Educational barriers

The final set of barriers is the educational barriers. Such variables as teacher qualifications, teacher performance, unconducive school climate, poor management styles all adversely affect quality efforts. In fact these variables define the operational process that dictates the quality of education offered in a school. Sallis (1996:45) says causes of quality failure fall into common causes and special causes. Common causes are attributed to systems' failure and manifest themselves through unsuitable systems, procedures and processes, insufficient staff development, and faulty timetabling. Special

causes are generally external to the organisation and would be covered under the four other barriers discussed above.

Some barriers to quality of education are born out of the very efforts to plan for quality. Kanji (1995:66) argues that some of the pitfalls in implementing a quality programme include scepticism, stereotypes and pushing down programmes such as TQM without consultation. Poor identification of training needs and overloading the training programme, as well as failing to build the requisite culture and philosophy can largely derail a quality programme.

2.9.6 General conditions for failure

Greenwood and Gaunt (1994:65) raise the following as conditions for failure in a quality drive. These conditions of failure if not corrected pose barriers to the provision of quality of education. Before quality can be installed it must be ascertained that these conditions are absent.

- Lack of cooperation across departmental boundaries and between academic and ancillary staff;
- Departmental imperialism in pursuit of resources, and promotion;
- Secrecy in decision-making and lack of communication;
- Isolation and fear of cooperation amongst classroom teachers;
- Excessive and proliferating bureaucracy;
- Absence of coherent training and staff development programmes; and
- Appraisal systems designed to manage by fear, rather than increase self-esteem and skills.

This list of barriers to quality of education is by no means exhaustive. Rather it highlights some of the common sources of quality failure. Understanding these generic barriers helps to chart a way towards improving the quality of education in schools, as some countries have attempted to do.

2.10 QUALITY OF EDUCATION INITIATIVES IN CHOSEN COUNTRIES

This section of the review gives a synopsis of educational quality initiatives in chosen countries. The focus is on initiatives in developing, rather than developed countries. This is so because the contexts and challenges of developing countries equate to conditions in Rural Day Secondary Schools in Zimbabwe, and it would be easy to draw meaningful parallels at the end of the study.

2.10.1 Case 1: Burundi: Providing quality education when resources are scarce: Strategies for increasing primary school effectiveness

This case is, given by Eisemon, *et al*, in Levin and Lockheed (1993:130-158). Eisemon, *et al* set out to establish: how language may affect measurement of pupil performance (focus was on use of foreign language for instruction and measurement); what contributes to effective classroom instruction, and the impact of student repetition on achievement. This study was carried out against a backdrop of increased school enrolment (256% between 1980/1 and 1986/7); reform emphasising ‘Kirundization’ and ‘Ruralization’ of schooling as well as automatic promotion to reduce wastage. This context is very similar to the conditions in Rural Day Secondary Schools in Zimbabwe.

Effects on achievement were measured through achievement tests (Concurs National). Variables leading to the effects were data from school directors and teachers, such as numbers, experience and qualifications of teachers. A total of 1 946 students aged between 11 – 19 years were used in the study. According to Levin and Lockheed (1993:130-158) the study came up with the following findings:

- Effects of language on performance

Performance scores were significantly higher for Kirundi (local language) versions of the tests in all subjects than for the French versions. Variations in mean scores for French

and Kirundi tests of knowledge of science and agriculture were the largest. Mathematics scores, which were generally low, did not show a significant difference for the French and Kirundi test versions.

- Contributions to effective supervision

The following concerning supervision were observed. Instructional supervision was hampered by distance between directors and schools; availability and management of instructional time and adherence to ministry policies, as well as teachers' previous experience and qualifications.

- Effects of repetition on student performance

Repeaters scored significantly higher than non-repeaters especially in mathematics. Repeaters scored significantly higher in the French versions of the tests.

Implications drawn from this case are that quality of education can be enhanced by breaking down language barriers in instruction, especially in subjects related to life skills like agriculture and intensifying instructional supervision. Repetition is not a total waste, providing students more time to grasp concepts has payoffs.

2.10.2 Case 2: Cote d'Ivoire: Improving quality at the local level

This case is given by Graca in IIEP Newsletter vol.XX No. 2 (April – June 2002:9). In a bid to strengthen national capacities IIEP set up a programme of developing a data base which would provide an in-depth knowledge of how a system operates and of the schooling conditions in each school. Graca (2002:9) says, "This type of tool contributes to strengthening partnerships at the local level and integrating the school with its environment by providing local authorities with relevant information they need for

managing the system and improving the quality of education.” In Cote d’Ivoire the project was undertaken by a team from the Ministry of Education made up of staff from the central, departmental and district levels. Analysis of this data, in less than a year led to better management of the functioning and quality of schools (by controlling new enrolments, pedagogical processes and results). It also strengthened the supervisory role of inspectors. Local school managers were able to have overall information on how schools were functioning and account for between-school variations.

2.10.3 Case 3: Sri Lanka: Improving the effectiveness in a plantation school:

The case of the Gonakelle School in Sri Lanka

The case is given by Little and Swasithambaram in Levin and Lockheed (1993: 87 -107). The context of Gonakelle School very much approximates that of Rural Day Secondary Schools in Zimbabwe. It is characterised by rituals anchored in national unity (national anthem and flag raising every morning), high student and teacher absenteeism (21% and 13% respectively on a typical school day), high teacher pupil ratios (1:54); lack of furniture and books, and general disorder in operations. Like most rural schools in Zimbabwe, it lies far away from the Regional Office and 200 miles from the state capital.

The programme to turn around the school was undertaken under the auspices of Badulla Intergrated Rural Development Project, a foreign funded investment venture that also included other sectors like health and agriculture. It adopted a project organisational structure in which the working team reported vertically to the Regional Director of Education and horizontally to the IRDP, which was housed in the Ministry of Plan Implementation (Levin & Lockheed 1993:87). The programme was driven by the following concerns:

- Focusing on the lower end of the education system;
- Improving the material conditions in education under which students learnt and teachers worked;
- Improving the quality of learning and teaching; and

- Improving effectiveness in the classroom.

The study adopted a new approach to managing education. A hitherto fragmented approach to educational planning was consolidated into one programme. Where previously various departments in the Ministry of Education were responsible for individual aspects like curriculum design, textbook writing and in-service training and the Ministry of Educational Services provided infrastructure and equipment, IRDP took over. This resulted in a more coordinated and more efficiently run programme. Levin and Lockheed (1993:87-89) say these were the elements in the programme:

- Production and distribution to all teachers of existing curriculum materials like syllabi (to date some teachers had not had sight of these);
- Design, production and distribution of new curriculum materials by small teams of teachers and resource persons from regional office;
- Training and orientation of key personnel, comprising trained and untrained teachers, principals and their deputies, as well as support staff; and
- Support mechanisms such as classroom and school supervision and setting up School Development Societies.

The programme yielded the following outcomes:

- Enrolment growth of 210% in five years, and a teacher establishment growth of 150% in the same period;
- Mean achievement gains of 25,5 in 1985 to 30,54 in 1987 with standard deviations of 14,28 and 22,03 respectively for Tamil language; and 27,16 in 1985 to 34,13 in 1987, with standard deviations of 14,35 and 14,25 respectively for mathematics; and
- Remarkable teacher stability.

Multi-sectoral approach to educational planning and use of teams improve quality of education. Super management of resources cannot be over emphasised.

2.10.4 Case 4: Thailand: School improvement in Thailand

The case is given by Tsang and Wheeler in Levin and Lockheed (1993:108) who say, “Given the crisis of resources and quality affecting schools in less developed countries, the policy challenges become how to expand available resources and to raise quality within existing resource constraints”... and “...the problems of school quality are especially severe for students from impoverished and economically disadvantaged backgrounds.” This sums up the context of the Thai schools, which is very much like that of Rural Day Secondary Schools in Zimbabwe. The question the case sought to answer according to Levin and Lockheed (1993:108) was, “Can existing resources be used more effectively to educate children from impoverished backgrounds?” aParticular research questions were:

1. How additional economic resources for schools can be mobilised by strengthening the relationship between a school and its local community and by increasing parental involvement in school activities.
2. Use of available educational resources through a management strategy of grouping schools in a district into school clusters. This helps to develop cooperation among schools and sharing of scarce resources.

The schools got contributions from parents through various gatherings. The principal played role of stimulating contributions, in cash or kind. In the clusters schools did training and staff development, built resource centres and shared critical information. The result was enhanced collective ownership of school programmes and accountability. School performance improved and supervision of teaching became more effective.

Various initiatives in several countries have been undertaken to enhance quality of education with tangible results. The commonality cutting across the success of these seems to be use of live data, teamwork and empowerment of those that deliver the

service. The Rural Day Secondary Schools in Zimbabwe can benefit if they try some of these initiatives, with pertinent modifications and adaptations.

2.11 SUMMARY

The chapter has traced the development of the quality debate from the era of inspection to present day TQM. Quality education is that education that is good enough to satisfy the needs of the consumer at an affordable cost. It is not necessarily expensive and exclusive. It is vital to focus on quality of education to ensure accountability and continually align the provision of education to be sensitive to the needs and aspirations of learners and society. There are heavy costs associated with lack of quality, but doing things qualitatively the first time allows quality to pay for itself. Several models of analysing quality have also been reviewed, the most recent being TQM propounded by Crosby, Juran and Deming.

A wide range of indicators of quality of education based on learner achievement levels, participation rates and conditions of learning can help in understanding the quality of education. Internal efficiency of the school system can be measured using such indicators as dropout rate; transition rate; survival rate; pass rates; study-time per graduate; and wastage ratio. Barriers to quality of education could be household, policy, community, infrastructure or education based.

This review of literature has been at a global level. The next chapter (3) reviews literature related to Rural Day Secondary Schools in Zimbabwe.

CHAPTER 3: REVIEW OF LITERATURE: RURAL DAY SECONDARY SCHOOLS IN ZIMBABWE

3.1 INTRODUCTION

One of the many challenges faced by the Zimbabwe government at independence in 1980 was the provision of education to all members of society (ZANU PF Election Manifesto 1980). The expansion of the provision of education was necessary to redress the imbalances that existed in the colonial past (IIEP 2001:213). Furthermore during the war of liberation the majority of blacks, especially in rural areas had lost out on opportunities to access education. According to Gatawa, (1998:29) the 1966 Education Plan prescribed that only 12½% of students completing Grade 7 would go into the F1 secondary education system, which was purely academic; 37½% would go into the F2 secondary education system, which was second-rate and mainly practical in nature. There was no formal provision for the remaining 50%. The F1 system culminated in the internationally recognised Cambridge School Certificate, which led to the Advanced School Certificate. The F2 system culminated in a Ministry of Education certificate beyond which there were no opportunities for educational advancement. It has to be noted that even before independence efforts, at least in theory, were being made to improve access to education. The 1979 Education Act established three groups of secondary schools to improve access to education (Education Act 1979). The groups were Group A schools which were in urban low density areas, Group B schools in urban high density areas and Group C schools in rural areas. However, Group C schools never took off before independence. Thus, at independence the government was faced with the mammoth task of expanding educational provision to the people in general, and rural people in particular.

3.2 EDUCATIONAL PROVISION JUST BEFORE INDEPENDENCE

In spite of the first rational attempt to reform African secondary education through the 1966 Education Plan, Zvogbo (1986:26) observes that by 1971 only one F1 government secondary school had been built, and there were fourteen missionary secondary schools.

In the plan it had been proposed that 300 F2 schools be built, but by 1979 only twenty-one such schools were operational with a total enrolment of 3 807 students. Gatawa (1998: 29) points out that this extremely constrained expansion is understandable given that while the government prophesied the desire to reform African secondary education, it simultaneously cut the education budget from 8,6% to 2% of total government expenditure. Zvogbo (1986:26) also points out that of the 127 790 students in Grade 7 in 1971, 10 360 reached Form 1; 2 525 reached Form 4 and 183 reached Form 6. This translates to a 8.10% transition rate, a survival rate of 24,37% from Form 1 through Form 4 and an ultimate survival rate of 2,00% from Form 1 to Form 6. Thus 0,14% of those in Grade 7 in 1971 managed to get to Form 6. This scenario shows that in practice educational provision for African children fell far below the letter of the 1966 Education Plan of providing formal secondary education to at least 50% of those completing Grade 7. The transition rate of (8,10%) was actually less than one sixth of the stated target.

According to the 1979 Education Act, secondary schools were put into three categories (Groups A, B, and C) based on their location and financial provisions. The Group A schools were those in the then practically whites only, low-density urban areas. These schools were 100% government funded and well resourced. They had specialist teachers for all subjects and operated with a teacher pupil ratio of 1:22.5. The top 25% students enrolled for a four-year course leading to an Associated Examination Board certificate; the next 25% did the same course in five years, the third 25% did a three year National Certificate in Education, while the last 25% did the National Certificate in Education in four to five years (Zvogbo 1986:60-61). It is important to note that entry into these schools was based on entrance tests set by the schools, and not the Grade 7 examinations set by the ministry.

Group B schools were in urban townships and comprised F1 and F2 schools. They were less resourced and were partly funded by government and the community (Zvogbo 1986:26-27). Entry was based on Grade 7 examination results, and students pursued a four-year course leading to the “O” level Cambridge School Certificate in the case of F1 schools, and a Ministry of Education Grade 11 Certificate in the case of F2 schools.

Group C schools were to be built in rural areas and financed mainly by District Councils and the communities, with supplementary tuition and building grants from government (Zvogbo 1986:26-27). Given the poor status of District Councils it was a given fact that these schools would be the poorest of the lot. However, given that the majority of people live in, and the magnitude of underdevelopment is higher in rural areas, it was imperative that the majority of new schools under the post-independence expansion programme fell into this category. It is thus important to manage the quality of education in Rural Day Secondary Schools as they address the needs of the most disadvantaged population sector.

3.3 BACKGROUND TO ESTABLISHMENT OF RURAL DAY SECONDARY SCHOOLS

Gatawa (1998:16) says at independence the government's first challenge was to deracialise and unitarise education and improve its access. According to Dorsey, Matshazi and Nyagura (1991:23) there were 197 secondary schools in Zimbabwe at independence, run mainly by government and some responsible authorities who charged prohibitive fees. Gatawa (1998:14) observes that, "The rural poor could not send their children there". Chifunyise (1998:11) comments that at independence the rural population was the most disadvantaged with regards to secondary education. Hence the government embarked on an ambitious programme to set up rural schools where parents provided labour and building materials. Thus, the challenge was not just to build secondary schools that would cater for all races and offer the same curriculum within easy reach of the majority of the people, but also to build low-cost schools that would charge fees affordable to the poor rural people. The option then was to go for Rural Day Secondary Schools (known as Upper Tops at that time). IIEP (2001:214) says, "The years 1980 to 1989 saw the construction of schools in rural areas where no secondary schools existed before," to meet social demand.

The rationale for Rural Day Secondary Schools was summarised by the then Prime Minister R.G Mugabe (1983:29) when he said:

This is why we have chosen to provide Rural Day Secondary Schools, which ultimately will be found in each of our districts. It is only fair that these people who get their pay once a year after harvest should have their children educated at easily accessible, affordable schools that should help uplift the whole community.

The vision was well conceived, and is consistent with the views of Deming (1986: 5) who argues that affluence is not a prerequisite for quality. Even in the absence of a wealth of resources, the low-cost school was meant to improve the quality of life of the customers.

Zvogbo (1986:68) further underscores the thrust to develop Rural Day Secondary Schools when he observes that considerable resources were being made available to all interested authorities to enable them to provide facilities for secondary education in rural areas. Mutumbuka (1982:38), then Minister of Education, argued that Rural Day Secondary Schools have advantages and he chronicled the following seven advantages:

- 1.They are the surest way of showing government commitment to provision of education for all.
- 2.Rural Day Secondary Schools make secondary education more accessible to many more children.
- 3.The cost of setting up five Rural Day Secondary Schools equals the cost of setting up one boarding school.
- 4.Even the poor can go to Rural Day Secondary Schools.
- 5.Students in Rural Day Secondary Schools do not lose parental influence and control, especially in the teenage/adolescent years.
- 6.Rural Day Secondary Schools are not elitist and link education to the home culture.
- 7.Concepts learnt by students can be easily and instantly be applied by the children in a natural home environment.

It is clear from these seven points that the intention behind the Rural Day Secondary Schools was to satisfy the customer, and ensure the service was readily available and affordable. Goddard and Leask (1992:10) concur that quality is simply meeting the

requirements of the customers. However, it must be noted that the quality of education in more affluent locations would be different, and graduates from the two set-ups would have to compete for the same jobs in a situation that clearly favours the former.

3.4 EXPANSION OF EDUCATIONAL PROVISION AFTER INDEPENDENCE

According to Gatawa (1998:16-17), at independence education was considered critical for economic development, and access to education was declared a basic human right. Gatawa's (1998:16-17) observation is resounded in the Zimbabwe Education Act 1987 section 4 (1), which states every child in Zimbabwe shall have a right to school education. Section 4 (2) proceeds to state that no child shall be denied access to education on the basis of political orientation, religion, race, gender or economic status.

Against this backdrop, Gatawa (1998:17) and ZANU (PF) Election Manifesto (1980:5) point out that the government set out to:

- Democratise and expand education;
- Develop adequate infrastructure countrywide;
- Improve quality and standards of education using low-cost materials;
- Make school expenses a life investment; and
- Provide sufficient materials and finance for education.

This vision saw an unprecedented increase in the number of both primary and secondary schools and student enrolments. This analysis dwells on expansion in the secondary sector, which was the focus of this study. IIEP (2001:213-214) gives the following average annual growth rates for the years 1979 to 1997 for the secondary school sector:

- Schools: 12.7%
- Students: 14.9%
- Teachers: 12.4%
- Supervisors: 8.5%.

According to Dorsey, *et al* (1991:18), in 1979 there was a total of 177 secondary schools in the country with a total enrolment of 66 215. A summary of the number of secondary schools, students, teachers and supervisors for four years is given by IIEP (2001:215) in Table 3.1.

Table 3.1: Number of secondary schools, students, teachers and supervisors for four selected years

Year	Schools	Students	Teachers	Supervisors
1979	177	66 215	3 534	36
1984	1 182	416 413	14 718	64
1989	1 506	670 615	24 547	156
1997	1 531	806 126	29 074	156

Growth was more pronounced between 1979 and 1984, but went on the decline thereafter. Growth in the number of supervisors was slower than growth in the number of schools, teachers and students.

Zvogbo (1986:72) says by end of 1981 the number of schools had grown to 685 (247,7% growth) with an enrolment of 145 801 (120% growth), and at the end of 1982 there were 740 secondary schools with an enrolment of 224 609 (a growth of 296% and 239%, respectively, from 1979). An interesting observation is that by 1981 the growth rate for schools far exceeded growth rate in enrolments. However, by 1982 the two rates had a smaller difference, implying that the rate of uptake of secondary school places was on the increase. In the wake of this expansion in the secondary education sector, Dorsey, *et al* (1991:18) observe that transition from Grade 7 to Form 1 peaked at 82% in 1982, which is not far off from the IIEP (2001:215) estimation that over the years transition from Form 1 averaged above 70 %. Muzenda (1983:19) says of the 740 secondary schools operational in 1982, 450 were Rural Day Secondary Schools, which implies that only 93 non-Rural Day Secondary Schools had been constructed. True to its promise of developing rural areas educationally government had devoted 82,9% of the newly constructed schools to the rural areas.

Gatawa (1998:18) says by 1989 the number of schools had grown up to 1 506 with an enrolment of 678 615. The Secretary for Education's Annual Report (1999) shows that the number of secondary schools had grown to 1 539 which translates to an increase of 760% from 1979 and 2,2% from 1989. Rural Day Secondary Schools constituted 70% of this growth (Chifunyise 1998:11). Beyond this point the growth rate in the number of schools built started to decline significantly, mainly because as Dorsey, *et al* (1991:19) observe, "At present the Ministry of Education and Culture is hoping to limit secondary school expansion and improve the quality of rural schools. According to the World Bank Report (1990:20-21), the government actually put a ban on new secondary schools and opted to close down small, inefficient schools that were not cost effective. It is therefore pertinent to look at issues of quality in the expanded school system that forced government to have a re-look at the expansionist policy, with particular focus on Rural Day Secondary Schools.

3.5 QUALITY CONCERNS IN RURAL DAY SECONDARY SCHOOLS

The scenario in Rural Day Secondary Schools is best summarised by Zvogbo (1986:59) when he says, "Nowhere else in education are the problems of educational reform more evident than in the sphere of secondary education." This proclamation is corroborated by Gatawa (1998:24) who says the drive for quantity after 1980 has not been matched by an equal investment in quality. This trend is not peculiar to Zimbabwe as UNESCO (2002:19) asserts that many African countries tend to focus on quantitative indicators of progress such as expanding access to education without paying much attention to quality issues. Although the World Declaration on Education for All (1990) drew attention for focusing on learning achievements, the End Decade Assessment of EFA presented in Dakar (2000) showed that quality issues were still not on top of the agenda of Sub-Saharan Africa as a whole (African Girl's Education Initiative 2002:21).

A study conducted by Dorsey, *et al* (1991:24) revealed that the quality crisis is more pronounced in Rural Day Secondary Schools, the majority of which are managed by District Councils. A number of problems and shortages characterise these schools.

Nyagura (1991:45) asserts that rural schools were headed by young and inexperienced heads who held only minimal, or at times not even minimal academic and professional qualifications. This researcher was one such school head in 1984. Soon after graduating from a primary teacher's college the researcher arrived at a Rural Day Secondary School, and was appointed head of department on the first day, deputy head at the start of the second term, and by start of the third term he had been transferred to head a neighbouring school. During this process there was no induction. This scenario negates the belief of Gatiss (1996:17) who says quality is about people. With inappropriately qualified people trying to drive the quality thrust in these schools it was inevitable that the venture would be abortive. The poorly equipped heads led equally, or worse equipped teachers as qualified teachers shunned rural schools (Gatawa 1998:20). In a bid to have at least a teacher in front of the students, the government resorted to hiring under qualified teachers. "O" level and "A" level school leavers formed the bulk of the teaching force, and there was no formal induction of any kind (Chifunyise 1998:11). Chung (1991:22) argues that quality of education should be improved by emphasising printed material in the light of limited human resources. Table 3.2 shows the spread of teachers by qualification and school type in 1988.

Table 3.2: Percentage of trained secondary school teachers by Responsible Authority, 1984

Responsible Authority	%	N
Trust schools	99	82
Government LDS (urban)	86	507
Mission Schools	72	379
Government HDS (urban)	44	914
Government (rural)	44	80
District Council (rural)	20	310
Total		2 272

3.5.1 Infrastructure

Dorsey, *et al* (1991:23) and Gatawa (1998:19) lament the shortage of physical infrastructure in Rural Day Secondary Schools and point out that enrolment grew so fast that students arrived ahead of classrooms and that the typical Rural Day Secondary School is unable to accommodate its students without double-seasoning. Other critical facilities like libraries and laboratories were scarce (Nyagura 1991:45-46). This assertion is reinforced by a report in The Chronicle of 16 January, 1989, to the effect that teachers in a Rural Day Secondary School were living with ostriches in an abandoned farmhouse. Under these conditions it was therefore inevitable that the quality of education was likely to be compromised. The scenario portrayed was that of a nation-wide expansion of schools to meet nation-wide expectations with a marked failure to provide the basic essentials for quality education that allows for enhanced student achievement.

3.5.2 Student achievement

Mutumbuka (1986:114-116) observes that while the problem of access to secondary education has largely been overcome, the problem of both internal and external efficiency of the school system has been barely tackled. Mutumbuka (1986:116) laments, “The last few years have witnessed a public outcry over what is perceived as a high failure rate in the “O” level examinations. In contrast to this examination results in urban schools appear better as highlighted in The Chronicle of 23 February 2003 where a Msitheli High School boy was reported to have got nine A symbols in the “O” level examinations in 2000. Msitheli High School is in the city of Bulawayo.

Commenting on academic advancement Dorsey, *et al* (1991:25) say, “There has, in fact, been a decline in pass rates at all levels and in all types of schools. Most noticeable, however are rural District Council secondary schools.” The assertion that pass rates in District Council secondary schools have been declining is debatable as with time the schools must be gradually moving out of the quagmire of shortage of resources, as more trained teachers move in and, more infrastructure is put up. Chifunyise (1998:11) points out that by 1998 untrained teachers in secondary schools constituted only 10%. This is

corroborated by IIEP (2001:215) which posits that as the number of teachers grew, the proportion of untrained teachers decreased due to expansion in teacher education.

While examination results *per se* are not synonymous with quality, they are a critical component thereto as they influence both student and parent satisfaction about what the school offers. Passing the “O” level examination is a requirement for sixth form selection and tertiary education as well as career pursuit (IIEP 2001:217). Thus the learning is fit-for use if it enables the students to enter the world of work and further education. For the schools to enable the students to enter the world of work, the schools must ensure that students pass the “O” level examinations. The average pass rate for “O” level examinations between 1992 and 1996 was 23%.

In spite of the seemingly overwhelming evidence that pass rates are on the decline, Chung (1991:24) argues, “I do not believe the quality has gone down at all.” This is because previous percentage pass rates were based on an ultimate 2% of the cohort that survived the various bottlenecks through to “O” level, while current pass rates are based on a much bigger proportion of the cohort (Zvobgo 1986:26). Thus, in terms of access to secondary education and the absolute number of passes, the quality has improved. Nyagura (1991:47-57) carried out a study on student achievement by school type in Zimbabwe and found out that Rural Day Secondary Schools performed in mathematics as well as former group B schools, in spite of shortages of human, financial and instructional resources. This is in spite of the fact that Rural Day Secondary Schools took in students with poorer Grade 7 results (Nyagura 1991:52). This further negates the fallacy that the expansion of the education system led to the compromise of quality. It was hoped that findings of this study would bridge the gap between these contrasting views on the status of the quality of education after the expansion era. The mere opening of these schools was to ensure that rural people had access to education, which on its own is an indicator of quality.

3.5.3 Accessibility of schools

Rural areas are sparsely populated, thus students in Rural Day Secondary Schools have to travel long distances and this presents a challenge to the system. Gatawa (1998:21) and Dorsey, *et al* (1991:23) postulate that the long distances to school resulted in illegal boarding. Although the students in these circumstances are included in official school attendance statistics, to all intents and purposes they were de-facto dropouts harbouring in the proximity of the schools, until they were let loose on society. IIEP (2001:216) further points out that dropout may be caused by examination and school fees which rural parents cannot afford. The conditions were squalid and un conducive for learning, as there was neither adult control nor guidance. Thus, the boarding campuses were an uncontrolled affair. This naturally was bound to affect the quality of education adversely and compromise the internal efficiency of the school system.

3.5.4 The curriculum dilemma

Another challenge facing the schools was the nature of the curriculum. When the government discarded the practical–subjects oriented F2 system at independence in preference of a unitary secondary education system, it adopted a predominantly academic curriculum previously pursued by the F1 system. A curriculum that was previously meant for only the top 12½% academically inclined primary school graduates was now open to the entire cohort (1966 Education Plan). Gatawa (1998:14) says the programme was a pure import of the Cambridge education system. Obviously this was a negation of the fact that students have varying academic potentials and inclinations. Concerning this, Zvogbo (1986:64) says it seems that government accepted the fallacy that academic education is the answer to problems of underdevelopment despite considerable evidence to the contrary. The result was that the majority of the secondary school students failed to proceed to higher education or professional training due to low pass rates (Zvogbo 1986:65).

The curriculum comprised 22 subjects. At the Junior Certificate level the students did eight subjects, with a core of English; mathematics; Ndebele/Shona; science and any two of geography, history, commerce/accounting; religious and moral education. In addition,

they had to take two practical subjects chosen from agriculture; fashion and fabrics; foods and nutrition; building and metal work, among others. At “O” level the students were supposed to do at least five of these subjects including English language. No practical subjects were compulsory at this stage (Ministry of Education 1988:1). The inclusion of practical subjects would require the injection of more financial resources into the education system.

3.6 FINANCIAL MANAGEMENT IN EDUCATION IN ZIMBABWE

There are different funding provisions for different types of schools in Zimbabwe. Basically the cost of education is borne by parents, government, responsible authorities, and donor agencies. The Zimbabwe Education Act 1987 section 29 explains the financial provisions for schools. Government schools are fully funded by government while schools falling under responsible authorities like District Councils receive a per-capita tuition grants, and full teachers’ salaries. The government also pays a grant in-and-of construction.

Responsible authorities charge fees and levies to parents of students enrolled in their schools (Education Act 1987:215). However, the fees and levies have to be approved by the Minister of Education, Sports and Culture. Dorsey, *et al* (1991:28) point out that 65% of schools fall under District Councils and it is among these that the majority of Rural Day Secondary Schools fall.

A study by Ncube (1993:102-106) revealed that District Councils tended to direct school fees and grants to non-educational projects, thus impacting negatively on educational provision. This position is consistent with an assertion in the World Bank Report (1992:52) that District Councils misappropriated educational funds. There is in fact no match between the supply of resources and cash inflow (Ncube 1993:104).

Concerned with financial mismanagement in District Council schools, government shifted the onus to manage school finances to School Development Committees (SDCs),

as a way of empowering communities to manage educational resources (Statutory Instrument 87 of 1992:613-615). Statutory Instrument 87 of 1992 empowers SDCs to charge, collect and administer school funds.

The initiative to empower the communities is indeed a way of trying to realise quality of education, as empowerment is a key aspect of TQM (Steyn 1999:28; Quong & Walker 1996:224; Weller 1995:15). However, the low levels of literacy and numeracy among the communities may hinder effective input from those who are being empowered. Thus, the legacy of lack of effective financial management in Rural Day Secondary Schools may adversely impact on the quality of education. An example of this is a story in The Chronicle of 15 November 2000 about students failing to write examinations after the school head squandered examination fees. The Chronicle of 5 October 2001 also reported that a school head was on the run after failing to account for school funds. Such occurrences inevitably compromise the quality of education in schools and there is thus, a need to address issues of quality in the provision of education deliberately.

IIEP (2001:217-218) asserts that the issue of quantity versus quality in education began to cause concern as early as 1981 as it was feared that expansion in the face of scarce resources could compromise quality. Aware that the education system was facing problems in providing quality education, the ministry undertook several initiatives to enhance the quality of education.

3.7 SOME EFFORTS AT IMPROVING QUALITY OF EDUCATION

The expansion of educational provision between 1980 and 1990 saw the number of secondary schools increase from 197 to 1 506 (665%) and enrolment rise from 66 215 to 678 615 (925%), according to the Secretary for Education's Report 1980, and the Secretary for Education and Culture's Report 1990. All this was against a backdrop of lack of efforts to evaluate developments against universally accepted criteria of efficiency, effectiveness and advisability in terms of a country's socio-economic status and the requirements of a sound education system, (Gatawa 1998:5). It was imperative

then, that at some point, the government do some introspection, and refocus on improving the quality rather, than the quantity of education.

World Bank (1990:20–21) and Dorsey, *et al* (1991:20–21) concur that the government has put a ban on the construction of new secondary schools. This development is confirmed by The Chronicle of 2 March 2003, which says there are 1 773 secondary schools in the country. This shows a vast drop in the expansion from 665% down to 18%, since 1990. While scaling down on expansion general initiatives have been put in place to improve the quality of education, and some of these are discussed in the ensuing sections.

3.7.1 The Better Schools Programme (BSP (Z))

According to Ministry of Education, Sport and Culture (1995:ii) at the World Conference on Education for All in Jomtien, Thailand in 1990 education ministries, international agencies and non-governmental organisations (NGOs) agreed on action plans to improve the capacity and performance of schools. This was meant to provide students with the highest quality of education within the context of shrinking resources. In Zimbabwe this agreement culminated in the establishment of the Better Schools Programme Zimbabwe (BSP (Z)). IIEP (2001:219) and IIEP (2001:233) explain that BSP (Z) is funded jointly by the Netherlands Embassy and the Zimbabwe government, and seeks to enhance school improvement through the development of teachers and clustering of schools. According to Ministry of Education, Sport and Culture (1995:2-3) the programme aimed to motivate teachers and administrators, develop a culture of effectiveness, effective classroom instruction, and create an enabling environment. The thrust of BSP (Z) is further emphasised by Chief Education Officer Circular Minute No.9 of 1994, which says the main aim of the programme was to improve quality of education through school management. This concept is consistent with elements of TQM advocated by Deming (1986:24-86).

The first phase of the BSP (Z) targeted school heads under the Heads Training and Support Programme (HTSP). The rationale for this starting point was that if school heads were empowered, they would lead the quality crusade in the schools. This was necessary, especially given the observation by Nyagura (1991:45) and Gatawa (1998:19), that the majority of schools were headed by, inexperienced, and under-qualified staff. According to Chief Educational Officer Circular 1 of 1994, school heads would work in clusters to assess school projects, set and administer cluster examinations and conduct staff development programmes. In addition to these activities, schools were issued with a set of seven modules to guide their activities. These were Self Development for Educational Managers (Commonwealth Secretariat 1993); Principles of Educational Management (Commonwealth Secretariat 1993); Personnel Management (Commonwealth Secretariat 1993); Managing the Curriculum and Resources (Commonwealth Secretariat 1993); Financial Management (Commonwealth Secretariat); Monitoring School Effectiveness (Commonwealth Secretariat 1993) and The Governance of Schools (Commonwealth Secretariat 1993). Issues of internal efficiency are raised in the module on Monitoring School Effectiveness (Commonwealth Secretariat 1993:5) and four categories of indicators of school effectiveness are given as follows:

1. *Internal performance indicators*

- Average length of study
- Success rate/graduation rates
- Distribution of students
- Market share of applicants
- Teaching performance
- Student learning outcomes

2. *Operating indicators*

- Class sizes
- Staff /student ratios

- Student workloads
 - Resource usage
 - Space usage
 - Assets and equipment usage
3. *External performance indicators*
- Acceptability of graduates
 - Destination of graduates
 - Employer/community feedback
 - Awards and honours
4. *Staff productivity indicators*
- Publications
 - Contracts
 - Invitations
 - Citations and qualifications
 - Membership in professional bodies

The internal performance indicators such as average length of study, graduation rates and student learning outcomes approximate the indicators of internal efficiency identified by Natarajan (1993:11), Moyo and Mubengegwi (1995:62-74) and DFID (2001:1). To this end, then it can be argued that the BSP (Z) was a thrust at improving internal efficiency in schools.

Ministry of Education, Sport and Culture (2001:1) argues that the trickle down effect of the HTSP to the teachers did not occur as expected. Thus it became necessary to move into a second phase of the programme that would directly involve teachers. This would give teachers an opportunity to undergo training, an aspect that enhances TQM (Steyn1999:33; Deming 1986:248; Creech 1994:90-91). According to Ministry of

Education, Sport and Culture (2000:1) and Ministry of Education, Sport and Culture (2001:1) the second phase focussed on setting up school clusters and resource centres.

3.7.1.1 School clusters under BSP (Z)

Ministry of Education, Sport and Culture (2000:17) defines a cluster as a group of five or six schools in the same locality which agree to work together to share human, material and financial resources in order to tackle their challenges and improve the quality and relevance in their institutions. A cluster is thus a development institution where school heads, teachers and the community work together in improving their practices. It is the basic implementation and management unit of the BSP (Z) that is supported by other ministry structures above it.

The focus of the cluster is to develop the school through mobilisation of resources (human, material, and financial) and setting up structures to facilitate translation of concept into action. The cluster, and its activities, is, driven by teachers who according to Ministry of Education, Sport and Culture (2000:2) have the critical role of the improvement of schools. There is thus a need to eliminate all problems that negatively impact on the work of teachers. Such problems include unsatisfactory learning levels, lack of co-ordination among activities, inadequate monitoring systems and lack of professional support for teachers (Ministry of Education, Sport and Culture 2000:2). The cluster therefore enables staff development for teachers and other stakeholders.

The Ministry of Education, Sport and Culture (2000:18) and the Association for the Development of Education in Africa (ADEA) (2000:36) highlight the following as the specific roles of clusters:

- Establishment and management of cluster centers;
- Maintaining records of cluster activities and cluster assets;
- Conducting needs analysis using tests, interviews, questionnaires, among other instruments;

- Formulating and installing annual training programmes for teachers, heads, SDCs and parents;
- Producing training materials;
- Setting and administering common tests for cluster schools termly; and
- Evaluating cluster activities regularly.

The cluster activities emphasise involvement of stakeholders, and are conducted from a Teacher Resource Centre. Resource centres are set up at the various levels of the BSP (Z) structures.

3.7.1.2 The BSP (Z) resource centres

According to the Association for the Development of Education in Africa (2001:36), resource centres were first introduced in Zimbabwe through a Chief Education Officer Circular in 1994 and are guided by three principles. The principles are participation by all stakeholders (teachers, school heads; students, and the community), collegiality, and decentralisation.

The Ministry of Education, Sport and Culture (2001:3) states that resource centres are information and training centres established as vehicles to improve the quality and relevance of education. Resource centres also enable teachers to share information and resources that may be in short supply. A resource centre is housed in a building that may be a spare classroom, a hall, a rented building, or where resources permit, own structures have been put up. The centres are equipped with books, journals, computers, and in some cases internet facilities.

A resource teacher and a secretary service the resource centre. These in turn report to a cluster management committee. Funding for the centre comes from donations, fund raising activities, levies (Ministry of Education Sport and Culture 2001:11). ADEA (2001:40) gives the following analysis of contributions to recurrent expenditure for district and cluster resource centres.

Table 3.3: Contributions to recurrent expenditure for district and cluster resource centres

Source of funding	Percentage of contribution
Government grant	0
Donor support	6
Levying schools	58
Levying teachers	8
Fundraising	4
Charging for services	1
Community support	23
Total	100

According to ADEA (2001:38) all districts in the country now have resource centres and these are distributed as shown in the table below.

Table 3.4: Distribution of resource centres by region

Region	District centres	Cluster centres	Number of Schools
Harare	7	37	273
Manicaland	7	188	1 025
Mashonaland Central	7	94	468
Mashonaland East	9	137	822
Mashonaland West	7	87	630
Masvingo	7	156	902
Mtatabeleland North	8	153	701
Matabeleland	7	101	556
Midlands	8	153	883
National total	67	1 106	6 260

3.7.1.3 Current comprehensive structure of BSP (Z)

BSP (Z) is a programme to facilitate the improvement of the quality of education, so the Permanent Secretary in the Ministry of Education Sport and Culture is responsible and accountable for all BSP (Z) activities, through the Director Schools and Non Formal Division, Regional Directors, Regional Co-ordinators, District Education Officers, District Resource Teachers and Cluster Resource Teachers. To be participatory, and involve more stakeholders the programme has structures at national, regional, district, cluster and school level. (Better Schools Programme Matabeleland North Region 2001:3-5; Mbudzi & Ndlovu 2000:2).

a. National level

At national level there is a management committee comprising Director Schools and Non-Formal education, Director Finance, Director Human Resources Development, Director Policy Planning and Research and all Regional Directors (Ministry of Education Sport and Culture 2000:10). The committee meets a minimum of four times per year and is responsible for all activities at national level and its functions include:

- Coordination and monitoring progress on BSP (Z) from a national perspective;
- Attending to any operational issues that cannot be solved by the National Coordinator;
- Strategic visioning and policy initiative allowing for consultation; and
- Deliberating on issues taken by the Director Schools and Non-Formal Education from the Advisory committee.

The Director Schools and Non Formal Education also chairs, the Advisory Committee that is composed of stakeholders, and meets at least twice a year (Mbudzi & Ndlovu 2000:12; Ministry of Education, Sport and Culture 2000:10). The committee discusses progress on BSP (Z) and suggests strategic options. It is also the policy making body for BSP (Z) and promotes networking to further BSP (Z) objectives.

b. Regional level

At regional level there is a management committee composed of the Regional Director, who chairs the committee, Regional Coordinator and all District Education Officers. The committee meets, at least four times a year, and focuses on initiating and strategising on BSP (Z) activities in the region. It also coordinates and monitors progress and supervises sub-committees (Mbudzi & Ndlovu 2000:12). Further it makes recommendations to the Advisory and National management committees. Also resident in the region is an advisory committee made up of stakeholders and chaired by the Regional Director. This

committee reviews progress and proffers strategic options and directs policy, and spearheads establishment of linkages.

c. District level

According to Ministry of Education, Sport and Culture (2000:12), the District Management Committee consists of the District Education Officer, Education Officers, the District resource teacher, cluster chairpersons and stakeholder representatives. The District Education Officer chairs the committee, which manages BSP (Z) activities in the district. It is also the mandate of this committee to mobilise funding, supervise sub-committees and make recommendations to the Regional Management Committee.

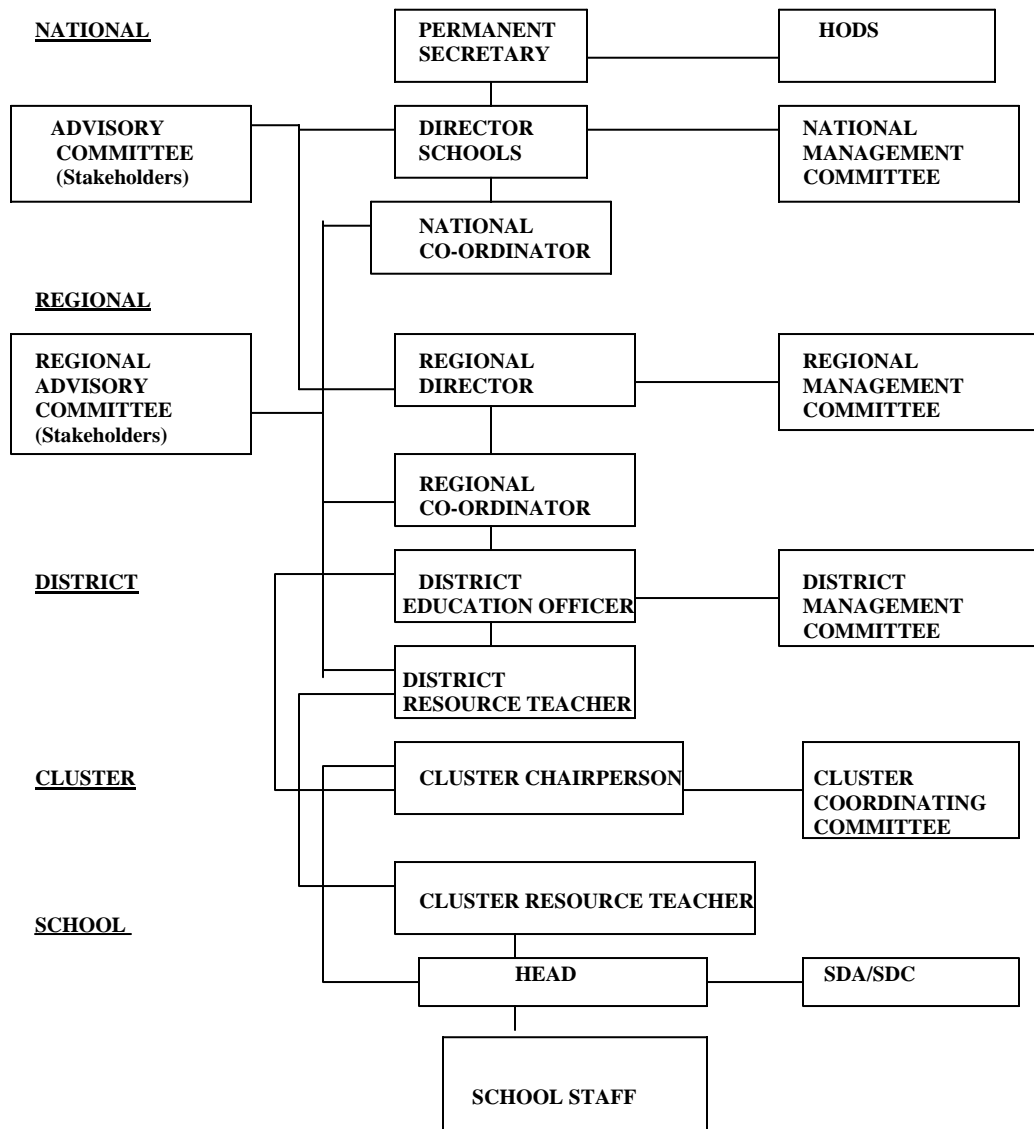
d. Cluster level

At this level there is a Cluster Coordinating Committee (Ministry of Education, Sport and Culture 2000:13). The committee consists of two school heads; the cluster resource teacher; one teacher per school, one head of department per school, one ECEC supervisor, the area councillor; one SDC representative, and two co-opted influential community members with an interest in educational development. Members choose a chairperson from among themselves. This committee initiates, coordinates and strategises on activities at cluster level. It also approves cluster programmes, finances and action plans, as well as monitors cluster programmes and makes recommendations to the District Management Committee.

e. School level

At the school level the BSP (Z) activities are, overseen by the school staff development committee comprising subject teachers. Where applicable student representatives can be co-opted into the committee, which focuses on assessing training needs of teachers and coordinating in service training for teachers.

Figure 3.1: BSP (Z) Organisational structure



The BSP (Z) structures allow for the involvement of a variety of stakeholders from the grassroots to top management in the pursuance of quality education. Steyn (1999:24) argues that to ensure the vision of the organisation is shared there is a need to adopt shared decision-making, decentralisation, and use of planning teams. The BSP (Z) has applied a similar principle. The responsibility to ensure quality is realised has been decentralised right down to the school level. Each committee is a planning team whose inputs filter into the organisation both upwards and downwards. At the national level all divisions of the ministry are represented in the management committee, a realisation that

quality should be organization-wide, rather than the onus of one department (Huxtable 1995:10). At the cluster level teachers dominate the committees and they work with community members, which is extending the focus of quality beyond one boundaries of the organisation and working with suppliers (Danks 1996:471). The community members are represented by SDCs.

The BSP (Z) largely tackles the quality of education by focussing on teacher improvement and empowerment, as well as the mobilisation of resources. This effort alone is not a guarantee for quality, but it works in support of other strategies. Thus to improve the quality of the assessment of student achievement the government set up a local examining board that would address the needs of the community in relation to examinations and certification.

3.7.2 The Zimbabwe School Examinations Council (ZIMSEC)

The quality of the assessment of student achievement is another aspect that the Ministry of Education Sport and Culture has attempted to address. In the pre-independence era, and the post independence era up to 1993 Ordinary level and Advanced level examinations were run by the Cambridge International Examinations Board, through the Examinations Branch, a department of the Ministry of Education, Sport and Culture (Makhurane 2001:2).

With the advent of a new socio-economic order after independence a need was felt to localise examinations in order to address local needs. There was also need to reduce costs and improve affordability of examinations as localisation meant that examination fees would be charged in local currency. This would help arrest the problem of dropouts, which is caused in part by high examination fees, which rural parents cannot afford (IIEP 2001:216). The process of localising examinations began in 1984 through the Examinations Branch (Makhurane 2001:2). In 1994 ZIMSEC was established as a body corporate with the sole responsibility of managing all school examinations in the country (ZIMSEC ACT No 17 of 1994:67).

3.7.2.1 The mission statement of ZIMSEC

ZIMSEC's vision is to be the centre of excellence within the sub-region and beyond in quality assessment in education (ZIMSEC 2001:1). The mission of ZIMSEC is spelt out as the quality assessment of candidates' learning/performance and awarding of nationally recognised certificates at different levels of the school education system, while optimally utilising the human and material resources it has available to it. The core values underlying the business of ZIMSEC include integrity, commitment, valid assessments, customer satisfaction and continuous improvement. Commitment, customer satisfaction and continuous improvement are key aspects of TQM (Deming 1986:24-86). Thus, ZIMSEC is an organ set up to improve quality of education in Zimbabwe. The functions of ZIMSEC according to the ZIMSEC ACT No. 17 (1994:67) are, among others, to:

- Organise and conduct such examinations in subjects that form part of a course of primary or secondary education as the Minister (of Education, Sport and Culture) may in writing direct;
- Consider and approve subjects suitable for examination;
- Appoint panels of boards of examiners;
- Approve and register examination centres;
- Review rules and requirements relating to examinations;
- Confer or approve the conferment of certificates, diplomas and other awards to persons who have passed examinations;
- Enter into arrangements, whether reciprocal or otherwise with persons or organizations, inside or outside Zimbabwe, for the recognition of certificates, diplomas and other awards granted by the council; and
- Do all things necessary to maintain the integrity of the system of examinations in respect of primary and secondary education in Zimbabwe.

These functions effectively make the conduct of the assessment of student achievement a process autonomously done by an independent body, thus leaving the Ministry of

Education, Sport and Culture to focus on the core business of teaching. This also makes assessment to be more objective.

3.7.2.2 Structure of ZIMSEC

The activities of ZIMSEC are directed by an Examinations Board, whose Chairman is a Vice Chancellor of a University appointed by the Minister (ZIMSEC Act No.17 of 1994:69). Other members are representatives from other universities; Zimbabwe National Chamber of Commerce; Law Society of Zimbabwe; Confederation of Zimbabwe Industries, and the Director. The Board reports to the Minister of Education Sport and Culture (ZIMSEC ACT No. 17: 69-70; Sibanda: 2001: 4 – 6).

The Director is the Chief Executive Officer of ZIMSEC and is assisted by a Deputy Director and five Assistant Directors, responsible for Examinations Administration, Finance, Human Resources, Information Services, and Test Development. Subject Officers are responsible for specific subjects and Regional Managers are stationed in each of the educational regions to provide an interface with schools and other stakeholders. Schools act as examination centres and ensure that examination administration is conducted as per set standards. (Sibanda 1999:13-16; Sibanda 2001:4-27)

3.7.2.3 Guarding standards at ZIMSEC

ZIMSEC (2003:2) points out that one of the most frequently asked questions is whether the localisation of examinations has not led to a decline in standards of examinations. To safeguard standards ZIMSEC has undertaken a number of measures. ZIMSEC (2003:2) says ZIMSEC is affiliated to the Association of Educational Assessment in Africa (AEAA) and International Association of Educational Assessment (IAEA). It is monitored by the National Academic Recognition Information Centre (NARIC), which also monitors reputable examination boards like CIE. This ensures that ZIMSEC adheres to internationally acclaimed standards of assessing student achievement.

Training is yet another measure that has been used to ensure high standards of assessment. According to Examinations Circular No. 15 of 2003, applicants to train as examiners must be certified graduates with secondary school teaching experience of not less than five years in a particular subject. Applicants are drawn from schools, Regional Offices, colleges and universities, and are screened on such attributes as punctuality, reliability, initiative and orderliness. Supervisors of applicants are also asked to make appraisals of the potential examiners, who then undergo an initial five-day training programme (ZIMSEC 2003:2–6). External consultants are used for the training sessions. For instance in 2001, 704 examiners were trained by consultants from Uganda National Examinations Board (UNEB), National Examinations Council of Tanzania (NECTA), and the Caribbean Examinations Council (CXC) (Thabethe 2001:16). Sibanda (1999:4) also points out that in 1999 a consultant from Cambridge came to participate in the grading meetings. Before each examination marking session examiners undergo some marking standardisation, and item writers are trained periodically.

3.7.2.4 Achievements to date

According to Sibanda (1999:1 – 4), ZIMSEC has managed to decentralise to all regions in the country. This has had the effect of enhancing an interface between the examination board and schools, parents and the community. The Council now has a physical presence among its customers and can thus easily run awareness and marketing programmes to bring the customers closer and listen to their concerns. The localization of “O” Level examinations was finalised in 1999, and on August 23, 1999 the Accreditation Agreement between CIE and ZIMSEC came to an end (Sibanda 1999:1). This meant ZIMSEC assumed full autonomy as an examination board and was thus thrust into a position where it can now respond more appropriately to the needs of the community it serves. The fees to administer the examinations would now be wholly in local currency and this makes examinations affordable even to the economically vulnerable groups in rural areas.

ZIMSEC has also experienced an uptake growth in “O” level candidature as portrayed in Table (Murira 2001:9).

Table 3.5: Growth in candidature for the years 2000 and 2001

Year	Examination session	Number of centres	Number of candidates
2000	June	772	58 095
2001	June	792	64 749
2000	November	1 706	280 673
2001	November	1 718	291 069

The results for examinations written in November 2001 were dispatched to schools on 1 February 2002, and this was earlier than in any other year in the last 21 years (Murira 2001:9). This was an indication of good time management. The national pass rates for the years 1999 to 2000 were as follows: 15,7%, 13,9% and 14%, respectively (Maramba 2001:19). The study sought to establish if pass rates in Rural Day Secondary Schools are different from these levels, as part of the analysis of internal efficiency. It is necessary to analyse the effectiveness of Rural Day Secondary Schools if they are to continually improve and compete favourably in meeting customer needs. For instance, in the ‘O’ level examination ratings for 2000 there were no Rural Day Secondary Schools in the first 150 schools (Chronicle 19/02/03). This disparity could be a reflection of the challenges facing ZIMSEC.

3.7.2.5 Challenges at ZIMSEC

ZIMSEC has not been without operational problems. Funding problems characterise the operations of ZIMSEC and the trend is getting worse, to the extent that the board failed to mark the 1999 Zimbabwe Junior Certificate Examinations (Makhurane 1991:1). This dirtied the image of the board.

Sibanda (1999:2) says, “A more distressing development was the mismatch of “O” level examination papers for November 1999.” There have also been reported cases of examination leakages (Sibanda 2001:5; Chronicle 15 November 2002). In spite of these

challenges the setting up of ZIMSEC appears to be addressing issues of relevance and quality in the assessment of student achievement and responding to the needs of clients.

3.7.3 The Clients' Charter

As a way of continuing to meet the needs of its customers more effectively the Ministry of Education, Sport and Culture introduced a Clients' Charter (Office of the President and Cabinet 1999:3). The mission statement for the Clients' Charter is, "To provide high quality and relevant primary, secondary and non-formal education and to facilitate access to and participation in sport, recreation and culture in order to enrich the lives of all people of Zimbabwe." This broad mission statement is broken down into more specific mission statements for the five divisions of the Ministry, which are: Schools and Non-Formal Education Division; Education Development Division; Sport and Culture Division; Finance Division and Human Resources Development Division.

The Schools and Non-Formal Education Division seeks to provide and promote quality early childhood education and care; primary; secondary; continuing and non-formal education for the total development of the individual child and adult so that they can be productive members of society. The thrust on total development is in line with Grisay and Mahlck's (1999:3) view that quality of education involves the extent to which the knowledge, skills, and values acquired are relevant to human and environmental conditions and needs. It is also in keeping with the view that a product or a service possesses quality if it helps somebody (Hoy, *et al* 2000:2). Being productive helps people to sustain their lives. According to the Office of the President and Cabinet (1999:3), in pursuance of this mission the division undertakes to:

Assess and respond to complaints regarding client's welfare, quality of service and other requests within five working days. Assess children with special needs and give support services within twenty working days

These undertakings reflect a high concern for customer satisfaction, which is a key aspect of TQM (Bell, *et al* 1994:3, Huxtable 1995:53; Gatiss 1996:17).

The Education Development Division has as its mission statement to facilitate the development of educational policy, plan the provision of quality education and provide teaching and learning resources (Office of the President and Cabinet 1999:4). This division thus undertakes to:

- Produce and review syllabi every five years and despatch syllabi within three months of production;
- Supply reports on evaluated learning materials to publishers within three months of receipt;
- Respond to requests by responsible authorities for citing and registration of schools, early childhood education centres and any other learning centres within fourteen working days of receipt;
- Provide statistical information to users within five working days of receipt; and
- Provide national educational statistics by June of every year.

The regular revision of syllabi and evaluation of learning materials is a commitment to TQM as it ensures continuous improvement, which Deming (1986:31) argues is the thrust of TQM. Sensitivity to customers is reflected by the desire to respond timeously to requests from clients. There is also evident a desire to provide information that aids the formulation of decisions that enhance the quality of education.

The mission statement of the Sport and Culture Division is to enrich the lives of all the people of Zimbabwe by formulating and articulating policies and providing facilities, coordinated programmes and institutions that promote and preserve cultural heritage and facilitate unlimited access to and participation in sport, recreation and culture (Office of the President and Cabinet 1999:4). The mission statement alludes to the fact that culture is an integral component of the quality of education, a view shared by Cotton (2001:4). The division undertakes to give policy on physical education, sport and culture. It also sets up, on demand, committees and structures to operationalise its policies. The use of committees allows more stakeholders to be empowered and participate in the pursuance

of quality. Steyn (1999:28) argues that empowerment creates a feeling of being in control of a situation.

For the Finance Division the mission statement is to ensure that there is efficient, effective and equitable distribution and utilisation of financial and material resources as necessary inputs towards the promotion of quality and relevant education (Office of the President and Cabinet 1999:5). In part the division seeks to respond to creditors within five working days, respond to applications to increase/vary school fees and levies for non-government schools within ten working days, and investigate cases of financial mismanagement as soon as they are reported. This overt attempt to address efficiency can help protect resources and improve the quality of education, especially in a set-up where resources are limited.

Finally, the Human Resources Development Division seeks to attract, develop and retain appropriately trained and suitably qualified staff for effective and efficient delivery of education, and to serve the public courteously and to ensure equity, transparency and fair play (Office of the President and Cabinet 1999:5). This mission statement is underpinned in the principles of TQM that an institution has both internal and external customers (Bell, *et al* 1994:3; Huxtable 1995:53). The appropriately trained and suitably qualified staff, constitute the internal customers, who must continually be trained and re-trained to meet the changing needs of the external customers. The training of staff is an investment in quality as Creech (1994:91) argues that payback from training dwarfs the cost of training.

The Client's Charter is a customer centred thrust towards improving the quality of education. The Charter is a ministry-wide strategy to improve accountability to customers as well as enhance effectiveness and efficiency in the delivery of education. Elements of TQM pervade the Charter. Customer involvement for parents can be realised through SDCs.

3.7.4 School Development Committees (SDCs)

The Education Act Amendment 1991 section 29 provides for the establishment of School Development Committees for registered non-government schools. For government schools School Development Associations (SDAs) are provided for. This is an effort to involve communities who are customers in the education system in the management of education. Community involvement enhances relevance and ownership of educational programmes.

Statutory Instrument 87 (1992:613) spells out some of the objects of SDCs as to:

- Provide and assist in the operation and development of the school;
- Advance the moral, cultural, physical and intellectual welfare of pupils at the school; and
- Promote the welfare of the school for the benefit of its present and future pupils and their parents, and its teachers.

The SDC is expected to do all things that are necessary or expedient for the operation, extension and development of the school in the best interests of its present and future pupils, their parents and its teachers. The committee is composed of five elected persons who must be parents, or legal guardians of students enrolled in the school, the school head, the deputy school head, a teacher at the school and a representative of the responsible authority.

On the other hand, Statutory Instrument 70 (1993: 494) empowers SDAs to:

- Promote, improve and encourage the development and maintenance of the school;
- Assist in the advancement of the moral, cultural, physical, spiritual and intellectual welfare of pupils at the school; and
- Promote and encourage programmes of interest, both educational and social, for the benefit of the students and their parents and teachers.

The SDA is composed of between seven and eleven elected members who must be parents of students registered in the school, the school head and deputy head (ex-officio members) and not more than two persons from bodies determined by the members. From amongst themselves the members elect a chairperson, vice chairperson, secretary and treasurer.

Both SDCs and SDAs are organs that promote participation and empowerment of both teachers and parents in the improvement of the quality of education. This arrangement is in line with the view of Quong and Walker (1996:224) that TQM is all about empowering people closest to the customers so they can decide on the best ways to improve. Teachers and parents, especially in rural areas are the closest source of learning for the students, and they need to be empowered.

SDCs/SDAs have the mandate to charge and administer levies from parents of students enrolled in their schools (Statutory Instrument of 1992 87:621, Statutory Instrument 70 of 1993:504-5). This means that the committees/associations can make full use of locally available resources to improve the provision of education in the schools. Deming (1986:5) argues that affluence is not a precondition for quality, thus if the committees/associations can mobilise and put to good use even the limited resources the quality of education in rural schools can be enhanced. The majority of Rural Day Secondary Schools are managed by SDCs since they are non-government.

3.7.5 The Quality Assurance Division

The Ministry of Education, Sport and Culture is headed by a Permanent Secretary below whom are four directors responsible for Quality Assurance (formerly Standards Control Unit, then Schools and Non-Formal Education), Finance, Human Resources Development and Policy Planning and Research (Mbudzi & Ndlovu 2000:12; Office of the President and Cabinet 1999:3-5). The Quality Assurance Division is the one directly responsible for monitoring and supervising the actual teaching/learning process in the

schools while the other divisions play a supporting role. Grauwe (2001:27) points out that formal school inspection and supervision in Zimbabwe only started in the 1930s and was then restricted to European schools only. The service was extended to African schools in 1972. Before independence school supervision services were divided into the European Schools' Inspectorate and the African Schools' Inspectorate, a structure that was discarded soon after independence (IIEP 2001:223).

To cope with the supervision of the expanded education system after independence, the primary sector and the secondary sector were separated, a format that is similar to those of Tanzania, Botswana and Zanzibar (Grauwe 2001:27). Supervisory services are decentralised from national level to regional and district levels. However, district supervisory structures do not exist for secondary schools, for which supervision is done by subject Education Officers based in the regions. The focus of this study was on secondary schools, thus the discussion does not delve into district supervisory structures under the Quality Assurance Division.

According to IIEP (2001:213) and Grauwe (2001:25) school education in Zimbabwe is divided into four levels. These are early childhood education, the seven-year primary school cycle; the four-year secondary school cycle ("O" level) and two years of high school ("A" level). Although students write national examinations at Grade 7 the results are not used for selection into secondary education. Once they enter Form 1 they are expected to progress up to Form 4 without repeating, but experience shows that they do repeat. This is a trend that this study analysed as an indicator of internal efficiency as repetition leads to a waste of resources. IIEP (2001:216) gives the following average national progression rates of students in secondary schools as at 1998.

Table 3.6: National progression rates of secondary school students as at 1998

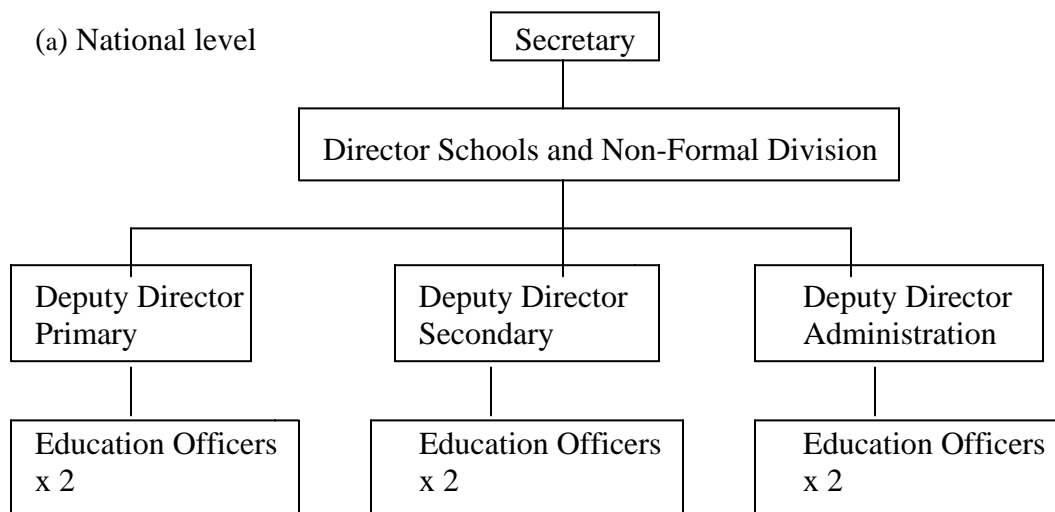
Forms	1 – 2	2 – 3	3 – 4	VI/L VI/U	–
% Rates	88.7	89.8	86.7	96.4	

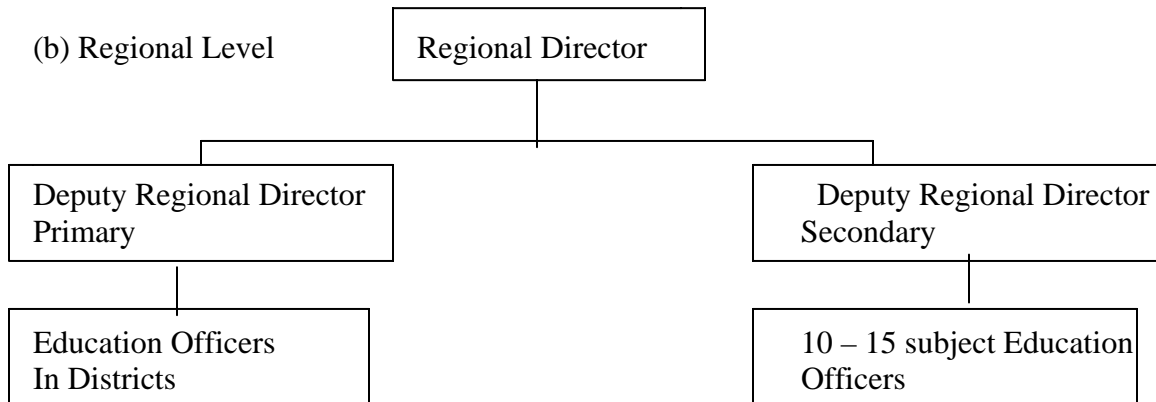
The study sought to establish if this trend holds true even for Rural Day Secondary Schools.

IIEP (2001:217) further observes that the Zimbabwe education system is examinations driven and examination results offer an interesting indicator of quality. The most critical examination seems to be the “O” level examination as it is used for selection into high school, tertiary education and the employment market. Those who pass the examination stand a better chance of profitable careers, while those who qualify for high school stand better chances of entering university than those who merely pass the examination, but are unable to proceed to high school. Given the importance attached to examination results this study investigated if pass rates at “O” level in Rural Day Secondary Schools have been different from the national pass rates.

IIEP (2001:223) gives the following structure of the division that supervise schools:

Figure 3.2:Organisational structure of the Quality Assurance Division (IIEP 2001:223)





The mission statement of the division is to uplift the quality and relevance of education offered in schools in order to enable the students to participate productively in the socio-economic life of the country (Bowora 2002:1; Ministry of Education, Sport and Culture 1996:1). This stance is supported by Bloch and Bloch (1998:6), when they argue that the Zimbabwean education system must address economic needs. The execution of the mission is mainly done by the subject Education Officers.

The subject officers visit the schools to supervise teachers to ensure that there is effective teaching. Grauwe (2001:39) and Ministry of Education, Sport and Culture (1986:1) concur that the functions of this department include:

- Overseeing curriculum implementation;
- Monitoring, assessing and evaluating the performance of school administrators and teachers in order to identify strengths and weaknesses and make suggestions for improvement;
- Organising staff development and in-service courses for teachers;
- Reviewing policy circulars and procedures so as to improve the ministry's professional administration service;
- Strengthening partnerships with stakeholders;
- Assisting schools to set up and maintain comprehensive assessment schemes; and
- Participating in educational research and surveys.

Mpofu (1986:1-2) and Makhalisa (1988:1-3) point out that the Education Officers must produce timeously reports on the performance of teachers and schools, so as to supply ministry with data that aids future planning for school improvement. The reports must be distributed to the schools, the teachers and ministry headquarters. This helps to share information on levels of performance and then collectively craft ways of improving the quality of education.

However, the functions of the Education Officers are not confined exclusively to the above activities as they also write examination items, mark examinations and produce examination reports (Murira 2003:1; Grauwe 2001:47). They also assist in curriculum development and serve on subject panels.

In all their operations officers in the Quality Assurance Division are guided by the need to maximise quality. Bowora (2002:1-2) outlines some of the quality indicators to be pursued by the division as:

- *Input indicators*
 - Student/text book ratio
 - Teacher qualifications
 - Teaching/Learning facilities
 - Financial management
 - Teacher housing
- *Process indicators*
 - Teacher utilisation
 - Teacher supervision
 - Space utilisation
- *Output indicators*
 - Dropout rates
 - Completion rates

Survival rates

Examination pass rates

These indicators are consistent with those identified by Natarajan (1993:11), Moyo and Mubengegwi (1995:62 – 74) and DFID (2001:1). Literature support shows that these are among the key indicators of quality hence the study sought to use some of them to analyse the internal efficiency of the Rural Day Secondary Schools. In pursuance of these indicators Bowora (2002:1) advises that officers must work with stakeholders.

The stakeholders include teachers and the community. These have been integrated into the supervisory system through the use of BSP (Z) resource centres and school clusters (Grauwe 2001:29). This integration has the effect of empowering teachers in pursuing quality of education.

3.7.5.1 Challenges in the Quality Assurance Division

Like the rest of the education system the Quality Assurance Division has faced many challenges in the wake of the phenomenal expansion. Grauwe (2000:29) argues that the distance from regional office to schools has proved difficult to bridge. This means that Rural Day Secondary Schools which are far away from the urban situated regional offices are not supervised as frequently as the more accessible urban and peri-urban schools. Table 3.7 provides a sample of supervisory trends in 1997 in a district as given by Grauwe (2001:103).

Table 3.7: Sample of supervisory trends in a district in 1997

Location	Number of teachers	Average years between visits	Number of visits in 1997
Urban	12	1.14	2
Peri-urban	13	1.7	3
Rural	10	4.22	0
Total	35	2.68	5

The average number of years between school visits is a minimum of 1.7 years for peri-urban schools and a maximum of 4.22 years for rural schools. This trend is explained by

Grauwe (2001:106) who argues that the criteria of choosing schools for supervisory visits is to target “problem schools”, overlook the close ones as they are believed to be established and doing well, and avoid going to the far and remote because of transport and other logistical problems. An average time of 4.22 years between school visits means that on average students enroll in a school and go through the four year “O” level course without the school having been supervised by Education Officers. For those students the Quality Assurance Division, and all it stands for, does not exist, and this makes rural schools very vulnerable in terms of quality of education. Ignoring urban schools, even if they are doing well is a negation of the TQM aspect of continuous improvement (Deming 1986:31; Bonstingl 1996:16; Fraizer 1997:16).

Effective supervision requires constant communication and both the supervisor and supervisee must be ready for the process. But this is not possible with rural schools, which do not have efficient communication networks. Grauwe (2001:109) contends that many rural and even peri-urban schools cannot be reached by phone or post. This results in Education Officers resorting to surprise visits that are not popular with teachers. Grauwe (2001:109) quotes one teacher referring to Education Officers using guerrilla warfare tactics, which do not yield good results. This scenario creates attitudes that retard the effectiveness of supervision as it is meant to be collaborative. Once again quality of education efforts are compromised in these circumstances.

Another challenge was that growth in supervision capacity lagged behind growth in number of schools and number of teachers. Grauwe (2001:54) gives the following figures for secondary schools for 1997–8.

Table 3.8: Supervisors for secondary schools in 1997-1998

Supervisors	Schools	Teachers	School/ supervisor ratio	Teacher/ supervisor ratio
156	1531	29074	9.8	186

The teacher supervisor ratio for Zimbabwe was lower than Botswana (222) and Namibia (335), but higher than Zanzibar (64) (Grauwe 2001:54). However this is a distorted picture as some Education Officers provide support services rather than do subject

supervision. A more accurate picture is shown by the subject specific analysis given in Table 3.9 (IIEP 2001:238).

Table 3.9: Spread of secondary school supervisors by subject in 1997-1998

Subject	Number of officers	Number of teachers	Supervisor/teacher ratio
English	14	4 058	290
Mathematics	11	3 490	317
Science	12	3 954	330
Geography	9	3 177	353
History	9	2 569	285
Shona/Ndebele	10	3 721	372
Religious Education	6	1 214	202
Commercials	6	1 577	263
Home Economics	9	1 884	209
Technical subjects	10	1 686	169
Agriculture	8	1 744	249
Guidance & Counselling	7	All (29 074)	4 153
Other officers	45	All (29 074)	646
Total	156	29 074	186

The teacher supervisor ratio is high and this explains partly why some teachers have not been supervised for a long time. The average number of school days in a year in Zimbabwe is at most 210, implying that even if Education Officers totally abandoned other chores and supervised one teacher per day they would still not be able to supervise all the teachers in a year. Programmes like BSP (Z) come in handy to bridge this supervisory gap.

The qualifications of the Education Officers also present a challenge. As of 1998 the Education Officers' qualifications were as follows.

Table 3.10: Qualifications of secondary school supervisors in 1997-1998

Qualification	Number
Certificate in Education	5
BA/BSc/BE	131
MA/MSc/MEd	18
PhD	2
Total	156

Source: IIEP (2001:238) & Grauwe (2001:65)

Only 12,8 percent of the officers had a post–graduate qualification. This implies that some of their supervisees were equally qualified or even better qualified. The quality of supervision offered in such a situation may be suspect. In the face of these, and other challenges it is necessary that the quality of education be continually analysed, especially in rural schools that are not only far from the regional offices, but also experience a shortage of a variety of resources (Nyagura1991: 45-46; Zvogbo 1986:59; Gatawa 1998:19)

3.7.6 The Presidential commission of inquiry into education and training

In January 1998 the state president constituted a Commission of Inquiry into Education and Training to review educational provision in light of current and future needs of the country (Nziramasanga 1999:xix). Amongst other things, the commission was tasked to review the relevance and quality of education in the face of the “...rapidly changing socio-economic environment.” In August 1999 the commission submitted its 643 page report covering a wide range of issues on the status of education in Zimbabwe. However, this study limited itself to those issues that relate to secondary school education.

Nziramasanga (1999:303) points out that transition rate from primary school to secondary school was approximately 79%. This figure is close to estimates of 70% and 82% (IIEP 2001:215; Dorsey, *et al* 1991:18). Further the commission observed that rural parts of the country with sparsely located schools experienced low transition rates and high dropout rates, a view also held by Gatawa (1998:21) and Dorsey, *et al* (1991:23). Among reasons for drop out were economic, social, cultural and religious issues.

On student achievement the commission’s findings were consistent with Nyagura’s (1991:52) conclusion that rural schools performed badly partly because they admitted students with low achievement from primary school (Nziramasanga 1999:304). Nziramasanga (1999:305) estimates the “O” level pass rate to be 20–25%, which is within 23% alluded to by IIEP (2001:217). However, this is way above the pass rate of 15,8; 13,9% and 14% for the years 1999, 2000 and 2001 respectively (Maramba

2001:22). The inference here is that in terms of student achievement in examinations the quality of education is declining. The study analysed if this is really the case with Rural Day Secondary Schools.

3.7 SUMMARY

Educational expansion in Zimbabwe has reached phenomenal levels. A lot has been achieved in terms of access to education at both primary and secondary school level. This expansion has been against a backdrop of a shortage of human, financial and material resources. Various programmes have been undertaken to enhance the quality of education, but there is still a need to do a close analysis of quality in the different school types as they are catered for differently and face different challenges. The next chapter explains the research methodology employed in this study.

CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN

4.1 INTRODUCTION

In Chapters 2 and 3, a review of literature on the quality of education in general and Zimbabwe in particular was done. From the literature in Chapter 2, it emerged that the quality of education can be measured using indicators of internal efficiency to determine the efficiency of the education system. The indicators of internal efficiency include survival rates; dropout rates; repetition rates, and pass rates. It also emerged that the quality of education is not only confined to numerical indicators, rather it is a relative concept that defines what is perceived to be good for the school. These views made it imperative for the researcher to opt for a combination of quantitative and qualitative research approaches. In Chapter 3 it emerged that the expansion of educational provision in Zimbabwe raised concerns about the quality of education, leading to the installation of various programmes by the Ministry of Education, Sport and Culture to enhance the quality of education. These programmes included the BSP (Z), ZIMSEC; the Clients Charter, SDCs and the Quality Assurance Division.

This chapter discusses the research design for the study, whose purpose was to analyse the internal efficiency of selected Rural Day Secondary Schools in Zimbabwe to see how it has affected the management of the quality of education. The chapter also discusses steps used by the researcher to establish if the programmes that were installed to promote the quality of education have been effective. The data collection for the study was guided by a set of specific research questions (section 1.2), and which are restated below.

4.2 RESEARCH QUESTIONS

The general problem statement formulated in Chapter 1 (section 1.2) was: How has the management of the quality of education in Rural Day Secondary Schools been affected by the internal efficiency of the school system?

The main problem was divided into the following four specific research problems, which were identified during the literature review:

1. What are the different levels of internal efficiency for Rural Day Secondary Schools for the years 1999 to 2003?

(Indicators of internal efficiency include: survival rates; dropout rates, repetition rates and pass rates.)

2. What are the variations in levels of internal efficiency of Rural Day Secondary Schools for the years 1999 to 2003, for students of different sexes, ages and levels of schooling?

3. What are school managers' (including some senior teachers) views of the programmes that were established to improve the quality of education of Rural Day Secondary Schools?

4. What strategies do school heads think can be implemented to improve the quality of education of Rural Day Secondary Schools?

4.3 RESEARCH DESIGN

The research design is a framework that shows which individuals will be studied, when, where and under what circumstances they will be studied (McMillan & Schumacher 1997:162). Borland (2001:5) and Meadows (2003:371) point out that a research design can be generally classified as either qualitative, or quantitative, or a combination of the two.

This study was a combination of the quantitative and the qualitative approaches, a strategy supported by Borland (2001:12) when he argues that quantitative and qualitative research are not mutually exclusive approaches, rather the most useful research findings typically result from appropriately applying both paradigms. It was necessary for the study to have this two-pronged approach, as the quantitative phase would yield numerical data to address research questions 1 and 2, while the qualitative phase would yield data for research questions 3 and 4. The two phases are briefly described below.

4.3.1 Quantitative phase

Research questions 1 and 2 in this study were descriptive in nature as they sought, to describe what was going on in Rural Day Secondary Schools (Meadows 2003:400). The appropriate design for this phase of the study was thus the descriptive survey, which would allow for the collection of quantifiable data from a sample. The researcher described the existing phenomenon by using numbers to describe trends of internal efficiency without manipulating or controlling subjects (McMillan & Schumacher 1997:37; Best & Kahn 1993:120).

4.3.1.1 Sampling

A research population denotes all those who fall into the category of concern, or objects or events that conform to specific criteria and to which we intend to generalise the results of the research (Oppenheim 1996:38; McMillan & Schumacher 1997:164). The population for this study was thus, defined as all the 1 077 Rural Day Secondary Schools in Zimbabwe. It was however not possible to use all the schools, so a sample was used.

Accordingly Leedy (1997:205-206) says a sample is that representative subgroup of the population that is chosen for direct observation. Meadows (2003:398-400) and Borland (2003:8) posit that quantitative descriptive research results are drawn from a sample, and generalised to the population of interest. This study used sampling to reduce costs and the labour of doing the research (Keller, Warrack & Bartel 1994:218; Lucey 2002:82).

In this study a combination of purposeful and convenient sampling was used. Moore (1991:8) and Robson (1995:141) argue that selecting whichever units of the population are easily accessible is called convenience sampling. McMillan and Schumacher (1997:174-175) argue that convenience sampling techniques are less costly, save time, ensure ease of administration and high participation while allowing generalisation to similar subjects, hence it was deemed appropriate for this phase of the study. Rural Day Secondary Schools were selected purposefully because they would yield the required

data. Matabeleland South region was chosen as the sample because it is in the vicinity of the researcher's residence, and it would be easy for the researcher to access records on internal efficiency of Rural Day Secondary Schools in the region.

McMillan and Schumacher (1997:172) and Leedy (1997:210) argue that the larger the sample, the better. In an effort to meet this requirement all the 97 Rural Day Secondary Schools in Matabeleland South region were included in the sample for the collection of numerical data.

Because students flow into the school system in cohorts, all the cohorts that were in school in 1999 to 2003 were chosen purposefully as the recency of the data would make it more relevant in contributing to educational development. Lucey (2002:181-184) and Wegner (2000:333) are of the view that the more recent the data, the more it is valuable in understanding current phenomena. These cohorts were also convenient in that it would be easier to access data on them, than data on cohorts in more remote years. The final sample for the quantitative phase of the study was as follows:

Table 4.1: Sample description of educational units

Unit	Number
Province	1
Schools	97
Cohorts	8

4.3.1.2 Data gathering

The data collection instrument used in this phase of the study was documentary analysis. Document analysis entails the researcher accessing relevant documents and extracting information for analysis (Leedy 1997:191). This took four months.

Best and Kahn (1993:26) say quantitative descriptive research uses quantitative methods to describe what is, describing, recording, analysing and interpreting conditions. It emerged in sections 1.1; 1.2; 2.7; 2.8 and 2.8.2 that the internal efficiency of the school

system is measured through numerical indicators like dropout rates, repetition rates, promotion rates, examination pass rates, average study time per graduate and wastage ratio (Hoy, *et al* 2000:13; Grisay & Mahlk 1991:5; McMahon 1993:28). The study therefore did a documentary analysis to collect the relevant data on the internal efficiency of Rural Day Secondary Schools. Best and Kahn (1993:191) say when documentary analysis is used in descriptive survey research, the analysis is concerned with the explanation of some phenomenon at a particular time, and some sources of data that can be used include records and reports. The following documents were analysed to extract the data for this study.

- Attendance registers;
- Records of ‘O’ level examination results;
- ED 46 B (1) forms; and

The preference of documentary analysis to a questionnaire for the collection of this data was meant to enhance accuracy as facts were being sought. Judd *et al* (1991:229-230) caution that questionnaire items requiring facts may lead to errors due to memory problems and respondents’ understating or overstating certain facts. Yet Oppenheim (1996:38) stresses that descriptive research requires a high degree of precision. The researcher also did not think it was fair to expect someone else to spend a lot of time extracting the data for him as this would take a lot of their time. Rather he asked for the documents from the regional and district offices and extracted the data himself.

A schedule (Appendix A) consisting of four questions, and adapted from the Ministry of Education, Sport and Culture’s ED 46 B (1) form was used to record data from the documents that were analysed to allow for the computation of the indicators of internal efficiency. The schedule captured enrolment by form, sex and age; repeaters by form and gender; dropouts by reason, and “O” level examination pass rates by sex.

4.3.1.3 Data analysis

Data from all the 97 schools was aggregated and presented using descriptive statistics, namely arithmetic means and percentages, and presented as bar graphs. The trends for survival rates, dropout rates, repetition rates and pass rates were analysed to answer research questions 1 and 2.

4.3.1.4 Measures to ensure validity and reliability

According to Nitko (1996:36-37) validity refers to the extent that a data collection instrument measures what it purports to measure, while reliability refers to the consistency of the results of measurements. It is critical that research findings are reliable and valid (Bell 1999:64). The important types of validity, which were considered for this study, were face validity, content validity, and external validity.

Face validity is the extent to which a construct appears to measure what it is supposed to measure. It is a matter of judgement (McMillan & Schumacher 1997:236). The researcher with the help of the supervisor scrutinised the instruments and deemed them to measure the targeted constructs.

Content validity deals with the representativeness of the items in a data collection instrument. In order to improve both content validity and face validity of the study the researcher read a wide range of literature on quality of education (internal efficiency in particular) and the construction of data collection instruments. The data collection instruments were given to an expert to judge them and to help refine them.

External validity seeks to establish the extent to which results of research can be generalised to the study population. To enhance external validity there is need to be explicit rather than implicit about the population to be generalised to (McMillan & Schumacher 1997:162; Judd *et al* 1991:35). The population for this study was specified in (section 1.2; section 4.3.1.1). Judd *et al* (1991:35) further argue that, “ To enhance generalisation, we want to select that sample so that it is as similar as possible to the population as a whole.” This was done by choosing schools with a completely rural

profile that typifies a Rural Day Secondary School and also by making the sample size big (97 schools).

It is critical for research findings to be reliable and this can be achieved by ensuring that the data collection instruments yield consistent information (Tuckman 1994:180-182; Nitko 1996:62-63). This study focussed on a detailed description of indicators of internal efficiency of Rural Day Secondary Schools, and there was need to maintain a high degree of precision (Oppenheim 1996:38). To ensure the accuracy of the numerical data collected, the researcher himself did a documentary analysis to extract the data from school records. This would yield more accurate data than the use of a questionnaire, which could be susceptible to inaccuracy arising from errors of memory by the respondents. To cross check for possible errors of entry, multiple records (class attendance registers, admission registers, ED46 B (1) forms and examination results summaries) were analysed for each cohort. The data collection schedule was pilot tested in ten schools from one of the six districts in Matabeleland South region to check if it captured the desired information as Oppenheim (1996:47) advises that, “Sometimes we can borrow or adapt questionnaires from other researchers, but we need to check if they will work with our own population.”

4.3.2 Qualitative phase

Data to address research questions 3 and 4 was collected using a qualitative approach. This would allow the researcher to solicit the views of school managers and school heads on the quality of education in Rural Day Secondary Schools. As Meadows (2003:398) says qualitative research helps to understand social phenomenon in a natural setting with emphasis on the views and experiences of the participants.

4.3.2.1 Sampling

For this phase of the study a convenient and purposeful sample of five schools was selected, guided by the views of McMillan and Schumacher (1997:169) who argue that a

convenience sample is a group of subjects selected on the basis of being accessible or expedient. The five schools were chosen one from each of the five districts that did not participate in the pilot study, on the basis of being closest to the researcher's place of residence. From each of the selected five schools, six school managers (including senior teachers) were purposively selected to ensure information-rich participants (Parton in McMillan & Schumacher 1998:397; Marshall 1998:60). Since the researcher intended to use focus groups to collect data from the school managers, six members per group was deemed an appropriate sample size. Daymon and Holloway (2002:192) corroborate this saying, "Six members is about right for most research purposes associated with traditional focus groups; it is large enough to provide a variety of perspectives but small enough not to become disorderly or fragmented."

Marshall (1998:60) says one form of purposive sampling is strategic informant sampling which is, "... selecting the people whom you think can give you the most information." This strategy of purposeful sampling was used as it was felt that school managers (including senior teachers) would have a lot of information on the impact of the programmes that were established to improve the quality of education of Rural Day Secondary Schools (research question 3).

Purposive strategic informant sampling (Marshall 1998:60) was also the rationale for including the heads of the five selected schools in the sample. The heads are in charge of implementing the quality of education in Rural Day Secondary Schools, and it was felt they were information-rich participants (Parton in McMillan & Schumacher 1997:397). They would thus yield valuable information on strategies that can be implemented to improve the quality of education of Rural Day Secondary Schools (research question 4).

4.3.2.2 Data gathering

a. Focus groups

For the qualitative phase of the study, data was collected from school managers (including senior teachers), and school heads of the five selected schools using focus group interviews and personal interviews, respectively. The focus groups for the school managers were chosen because they are less time consuming than conducting numerous individual interviews, and they facilitate the collection of a large amount of data from many respondents simultaneously (Daymon & Holloway 2002:187). It is thus an efficient method. The method also increases the quality and richness of the data as group members are stimulated by the perceptions and ideas of others within the social environment in which the group is situated (Daymon & Holloway 2002:186; McMillan & Schumacher 1997:453). Academy of Educational Development (2004:1) advocates that to collect sufficient data four to six groups may be used, and thus in this study five focus groups were held with six school managers in each of the selected schools. An interview guide (see Appendix B) was used to ensure that all critical issues were addressed in any sequence. The natural flow of conversation was, followed hence the sequence for the different groups differed (Daymon & Holloway 2002:195). Section 3.7 details some efforts at improving the quality of education in Zimbabwe, and the interview guide was based on these programmes, namely, the BSP (Z), ZIMSEC, the Clients Charter, SDCs and the Quality Assurance Division. The length of each focus group was at least one hour and fifteen minutes. Each focus group was tape-recorded, and later transcribed verbatim.

b. Personal interviews

To address research question 4 individual interviews were conducted with the five heads of the conveniently selected schools. The interviews were semi-structured only so as to avoid imposing, "...the researcher's frame of reference on the data to be generated," (Marshall 1998:38). The quality of education is a diverse and relative concept and different people view it differently so to get their true views there was need to allow a free flow of the school heads' ideas. To ensure a comprehensive coverage of all critical issues a discussion guide was used as advised by Daymon and Holloway (2002:195) (see appendix C).

The interview guide was based on discoveries in sections 2.9; 3.5; 3.5.1 that barriers to the quality of education include household barriers, policy barriers, infrastructural barriers, educational barriers such as the curriculum, teacher qualifications and teacher performance, as well as accessibility of schools. Each interview lasted between 45 and 60 minutes and was tape-recorded, and later transcribed verbatim.

c. The researcher as a data gathering instrument

In the qualitative phase of the study the researcher acted as a data-gathering instrument, a tactic advanced by Daymon and Holloway (2002:90). This view is further reinforced by Borland (20001:6) who says, “The researcher who conducts qualitative research must recognise that they are the primary instruments for the research design, data collection...” In order to prevent the interpretations from being influenced by the researcher’s perceptions the words of the participants were tape-recorded and then transcribed verbatim and focus was paid to participants’ own words in the analysis. The researcher was also aware of the researcher-respondent difference to avoid projecting himself over the respondents.

Issues addressed in the focus groups were derived from the wide literature review on quality of education that was done prior to data collection (Chapters 2 and 3), rather than the researcher’s own perceptions. The researcher also read relevant literature on how to collect qualitative data especially the use of focus groups. All these measures helped to avert bias that may result when the researcher acts as an instrument of data collection. (The interview guide for the personal interviews appears as Appendix C).

4.3.2.3 Data analysis

The data tape-recorded during both the focus groups and personal interviews were transcribed verbatim and then analysed as follows.

a. Segmenting

The researcher read through the transcribed data thoroughly to get a big picture of it so as to be able to segment it into coherent themes (Daymon & Holloway 2002:234). This also enabled the researcher to identify data segments that were critical in addressing the specific research questions. The data from focus groups was segmented into five segments in line with the number of programmes that were introduced to improve the quality of education of Rural Day Secondary Schools, namely BSP (Z), ZIMSEC, the Clients' Charter, SDCs and the Quality Assurance Division. Coding was then done under these segments. Data from personal interviews was segmented into positive factors and negative factors that affect the quality of education of Rural Day Secondary Schools.

b. Coding

A bottom up coding was used. This means that as the data were analysed, a coding system was developed to suit the data. Hence, no coding system was developed before data collection was completed and data analysis started.

The researcher read through the transcribed focus groups to get trends that emerged. Initially points that emerged were coded numerically, where a point appeared in subsequent sections it was given the same numerical label as before. The numbered points were then grouped into main themes. Four main themes emerged on the views of school managers and some senior teachers on the programmes that were established to improve the quality of education of Rural Day Secondary Schools. The participants expressed their views in terms of:

1. Programme worth and perception;
2. Programme achievements;
3. Programme challenges; and
4. The way forward for the programme.

For each of the programmes that were introduced to improve the quality of education of Rural Day Secondary Schools the analysis was based on these themes. The themes were coded as follows: programme worth and perception (A); programme achievements (B); programme challenges (C) and the way forward (D). The frequencies of the appearance of the themes were then taken and the sequence of the discussion of the issues was based on the frequencies. For instance, if an issue was raised for the first time as the fourteenth point in the narrative about lack of accountability in BSP (Z), it was coded C14.

In the transcribed personal interviews with school heads the issues raised were initially coded using letters of the alphabet as they emerged. If an issue was raised more than once each time it surfaced it was given the same code as before. Further analysis allowed further division of data into factors that impacted positively on the quality of education of Rural Day Secondary Schools and strategies that could evolve around that, and factors that impacted negatively on the quality of education of Rural Day Secondary Schools, as well as the strategies for improvement that could evolve from those factors. The codes P and N were used to denote positive impact and negative impact, respectively. For instance, if pass rates were raised as the first point in the transcription, and they were viewed to affect the quality of education negatively, that portion was coded AN, each time it surfaced. Finally the frequencies of the codes were taken and were used as the basis for sequencing the discussion of the issues.

c. Master sheet and ranking

All the codes were put on a master sheet and the frequencies were noted to help rank the themes and issues according to their importance. However, the main emphasis was on the quality of the data and not the quantity thereof.

d. Linking the categories

The categories were compared among themselves to show emerging patterns of relationships (McMillan & Schumacher 1997:502). The relationships analysed included

cause-effect, association and rationale for the relationships (Johnson & Christensen 2000:437).

4.3.2.4 Trustworthiness

The trustworthiness (validity and reliability) of qualitative research is the, "...credibility of description, conclusion, explanation, interpretation, or other form of account," (Maxwell 1996:87). In this study the view of Daymon and Holloway (2002:93) who argue that the criteria for evaluating trustworthiness are credibility, transferability, dependability and confirmability was adopted.

a. Credibility

McMillan and Schumacher (1997:162) say, "...credibility, refers to, the extent to which the results approximate reality and are judged to be credible." To enhance credibility the interviews were tape-recorded and transcribed verbatim to ensure an accurate reflection of the respondents' views. The use of focus groups as well as personal interviews also allowed for data triangulation as data was collected from different groups and by different methods (Daymon & Holloway 2002:99). Pilot testing of the data gathering instruments and comparison of findings to discoveries in literature review also helped to improve the credibility of the results in this study.

b. Transferability

Transferability implies that specific, knowledge gained from the research conducted with small samples, can be transferred by the reader to other similar settings (Daymon & Holloway 2002:93–94). In this study this was achieved by carefully selecting samples that typify Rural Day Secondary Schools and respondents who have experience in working in Rural Day Secondary Schools. The research questions for the study were based on a range of literature review on quality of education in general, and Zimbabwe in

particular (Chapters 2 and 3). This makes it possible for other researchers to relate the findings to their own settings in the realm of quality of education.

c. Dependability

For research findings to be dependable they must be consistent and accurate (Daymon & Holloway 2002:94). Consistency and accuracy were catered for in this study by tape-recording responses from the subjects and transcribing them verbatim to ensure that critical details were captured. The researcher also demonstrated an audit trail, detailing the processes of how the study was conducted (Marshall 1998:63).

d. Confirmability

This criterion of trustworthiness concerns the achievement of the aims of the study, rather than the researcher's assumptions and preconceptions. This was done partly by coding the themes in the data to show how it was linked to resources. Daymon and Holloway (2002:94) argue that, "To indicate at the proposal stage how confirmability will be demonstrated in your research, it is sufficient to outline the early intentions of your study, that is, your proposed research, your expectations ..." This was done by clearly articulating the aims of the study at the onset (section 1.3.3; section 1.7).

4.3.2.5 Ethical Measures

When collecting research data it is very important that strict ethical standards are maintained at all times (Bell 199:53). Amongst others, this is to ensure that the rights and welfare of the subjects are protected. This study did take into consideration certain ethical provisions as outlined below.

a. Approval for conducting the research

For research conducted in an institution like a school system approval for conducting the research should be obtained from the institution (McMillan & Schumacher 1997:195; Bell 1999:52). For this study the researcher wrote to the Secretary for Education, Sport and Culture asking for permission to do the research in the schools since he is the most senior officer in the Ministry (see Appendix E). Data collection only commenced after the approval to do the research had been obtained.

b. Informed consent

Tuckman (1994:13-14) argues that subjects have the choice to participate, or not to participate in any research. Thus if subjects are to participate in a study the researcher must obtain their informed consent (Robson 1995:471–473). Informed consent was achieved by providing an explanation of the research, the implications of participating, and that respondents were free to withdraw their services at any time (McMillan & Schumacher 1997:194). The researcher met the respondents in their schools. The purpose of the study was explained in detail to the respondents. Even though permission to carry out the study had already been granted by the Secretary for Education, Sport and Culture it was imperative to talk to the respondents and get their consent as Bell (1999:58) says, “Getting management permission is one thing, but you need to have the support of the people who will be asked to give interviews or complete questionnaires.”

c. Confidentiality and anonymity

Data collected for research must be secured, treated in confidence and made public behind the guise of anonymity (Christians 2003:139; McMillan & Schumacher 1997:193). In this study the respondents were requested not to expose their names, or those of their schools during the interviews. In the data analysis the names of the schools are not referred to. This was meant to protect the reputation and images of the schools in the face of whatever results would emerge from the study as Oppenheim (1996:83) says, “The basic ethical principle is that no harm should come to the respondents as a result of their participation in the research.”

d. Honesty and accountability

It is important that the researcher is honest and accountable in dealing with subjects. The researcher in this study undertook to keep all information availed in good care and use it exclusively for the study. No deception was used on the respondents.

e. Access to results

McMillan and Schumacher (1997:194) insist that subjects are entitled to the research results. Due to prohibitive costs it was not possible to give copies of the completed study to all the sampled schools. However, one copy of the research report will be given to the office of the Regional Director of the region that participated in the study as well as the Secretary for Education, Sport and Culture.

4.4 SUMMARY

The study employed a combination of the quantitative and qualitative research approaches to collect and analyse data. The quantitative phase addressed research questions 1 and 2, while research questions 3 and 4 were tackled using the qualitative approach. Document analysis, focus group and personal interviews were used to collect numerical and qualitative data.

CHAPTER 5: DATA PRESENTATION, ANALYSIS AND DISCUSSION

5.1 INTRODUCTION

In chapter 4 the research design for the study was explained. The study whose main research question was, “How has the management of the quality of education in Rural Day Secondary Schools been affected by the internal efficiency of the school system?” used both a quantitative design, and a qualitative design. This two-pronged approach was deemed appropriate since the quality of education can be analysed both quantitatively and qualitatively (Wardsworth *et al* 2002:15). The combination of the designs is also supported by Borland (2001:5) who says:

The relationship between qualitative and quantitative research should not be considered in terms of a mutually exclusive dichotomy, but rather as a continuum of complementary paradigms within systematic scientific inquiry that, when used in concert, produce complete or useful knowledge.

The qualitative phase allowed the researcher to measure the indicators of internal efficiency of selected Rural Day Secondary Schools, such as enrolments, survival rates, dropouts, repetition, and pass rates. The qualitative phase enabled the researcher to analyse the views of school heads, school managers (including some senior teachers) on the factors that affect the quality of education in Rural Day Secondary Schools, as well as strategies that can be used to improve the quality of education thereof. The presentation, and discussion of results in the study are therefore divided into the quantitative phase and the qualitative phase, with a summary that attempts to consolidate findings from the two phases.

5.2 FINDINGS FROM THE QUANTITATIVE STUDY

The quantitative phase was used to address the first two research questions, which were:

1. What are the different levels of internal efficiency (dropout rates; repetition rates; survival rates and pass rates) of Rural Day Secondary Schools for the cohorts that were in school from 1999 to 2003?
2. What are the variations in levels of internal efficiency of Rural Day Secondary Schools for the cohorts that were in school from 1999 to 2003, for students of different sexes, ages and levels of schooling?

The sample used for the quantitative phase of the study was all the 97 Rural Day Secondary Schools in Matabeleland South Region. The region was sampled conveniently because of its accessibility to the researcher (Moore 1991:8; Robson 1995:141). To ensure reasonably recent data was used, the students who were enrolled at the four levels of schooling in all the selected Rural Day Secondary Schools from 1999 to 2003 were used for analysis. Altogether there were 61 883 registered students on which the analysis of internal efficiency of Rural Day Secondary Schools in this study was based. (see Appendix A). Data were extracted from attendance registers; ED46B (1) forms and records of “O” level examination results.

5.2.1 Enrolment patterns for the selected cohorts

The full details of enrolment patterns in the selected schools for 1999 to 2003 are given in appendix A. Summaries of the enrolment by different variables are given in the form of bar graphs below.

5.2.1.1 Enrolment by form and gender

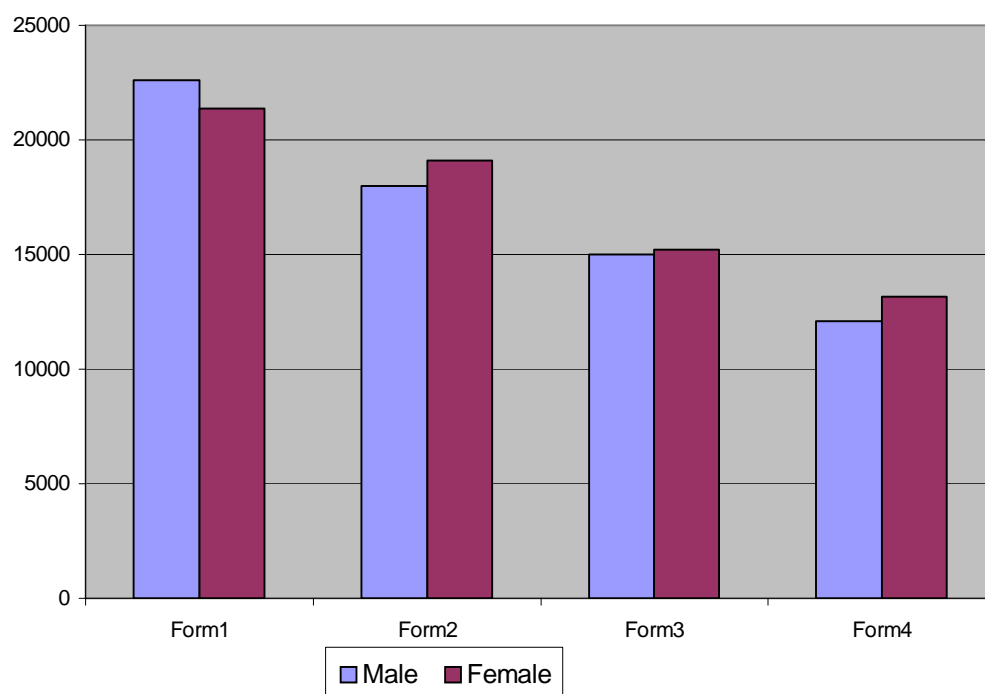


Figure 5.1: Summary of enrolment by form and gender

Overall enrolment decreased as the level of schooling went up. Enrolment was highest at Form 1 and lowest at Form 4. This implies that survival rates between Form1 and Form 4 are low. At Form 1 level there were more males than females, but at Form 4 level there were more females than males, implying that the survival rate of females is higher than that of males. The decline in enrolment is a result of high dropout rates due to such factors as failure to pay school fees and pregnancy of girls, in rural schools. This view is supported by UNICEF (2002:2) and Gatawa (1998:10) who argue that, while developing countries have done remarkably well in terms of extending education to an appreciably large percentage of their school going population, school performance, as measured by dropouts has not been encouraging. Enrolment was lowest at Form 4 because at this level students also have to pay examination fees on top of school fees, and those who cannot afford to pay the examination fees are likely to dropout. IIEP (2001:216) points out that dropouts may be caused by examination fees, which rural parents cannot afford. That there were more males than females at Form 1, but more females than males at Form 4 could be due to the fact that as males grow older, they may leave school to seek

employment, among other things, as reported in The Chronicle of 23 May 2002, that male students were leaving school to work in the farms and across the country's borders.

5.2.1.2 Enrolment by age and gender

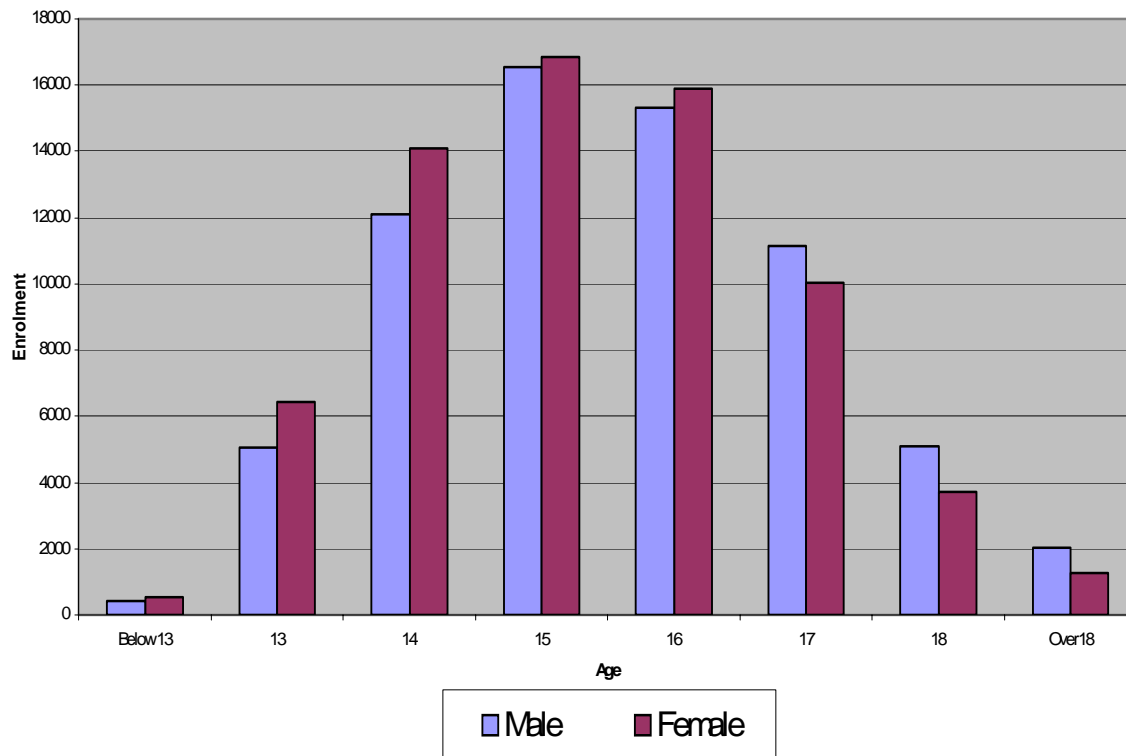


Figure 5.2: Enrolment by age and gender

The distribution of enrolment by age shows an almost normal distribution for both male and female students. For both sexes the modal age was 15 years followed by 16 years, which are within the official school going age. There were, however, a few students at the ages of 18 years and over 18 years who were enrolled. These students were beyond school going age and constitute lack of internal efficiency in terms of age specific enrolment ratios (IIEP 1989:10; European Trade Union Committee on Education General Assembly 2000:1). For the ages 16 years and below there were more female students than male students, but there were more males than females at the ages 17 years and above. There were therefore more male students who were above school going age than

there were female students. The reason may be that females who are above school going age opt for marriage and leave school due to pregnancy. Table 5.11 shows that pregnancy is the second single driver of dropouts for female students. The older the students, the more vulnerable they are to falling pregnant.

5.2.1.3 Enrolment by form and age (male)

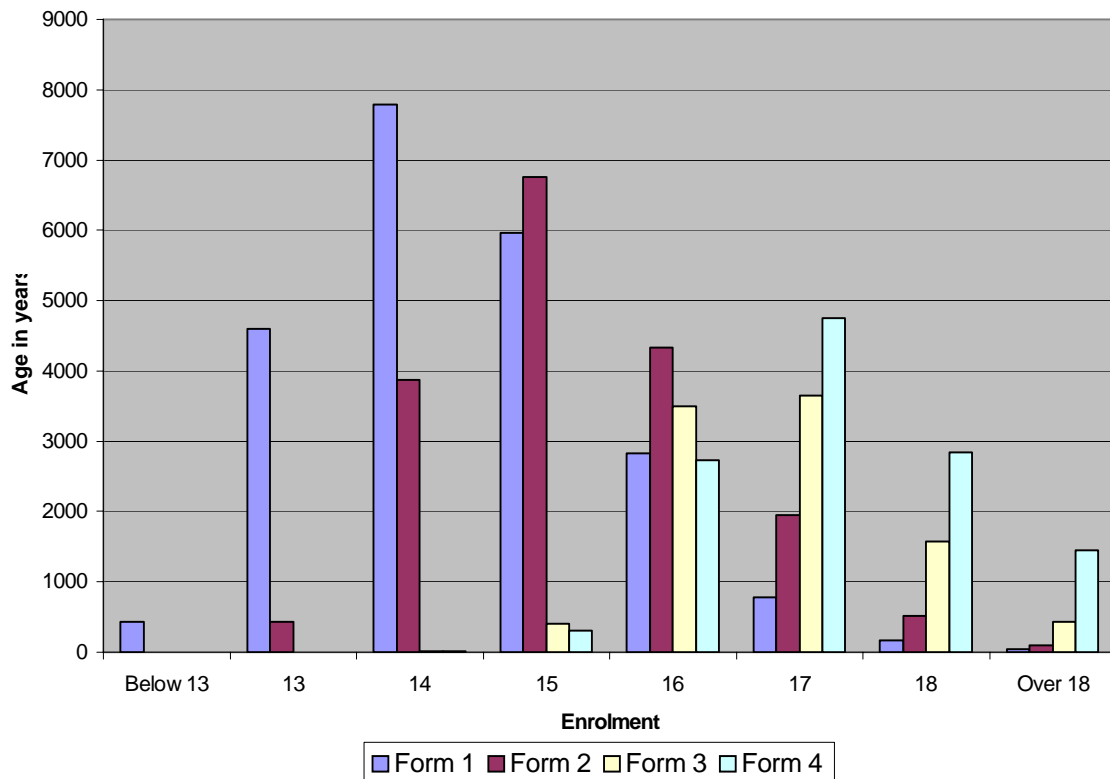


Figure 5.3: Enrolment by form and age (male)

The largest single group was that of male students aged 14 years, and in Form1. The distribution was slightly positively skewed with the majority of students being below 16 years of age. The oldest students in Form 1 were 18 years of age while in Form 2; 3; and 4 there were students who were above 18 years of age, compromising the age specific enrolment ratios, (IIEP 2001:210; European Trade Union Committee on Education General Assembly 2000:1). The reason for the prevalence of overage students in Rural

Day Secondary Schools could be the distance between the students' homes and the schools. In section 5.3.2.2 (g) it emerged that students travel very long distances to school so it is possible that some students delay entering school until they are old enough to walk the distances. It is also possible that the younger students dropout of school due to the challenge presented by the long distances, thus leaving older students in the school system. The fact that long distances contribute to school dropouts is supported by Gatawa (1998:21) and Dorsey, *et al* (1991:23).

5.2.1.4 Enrolment by form and age (female)

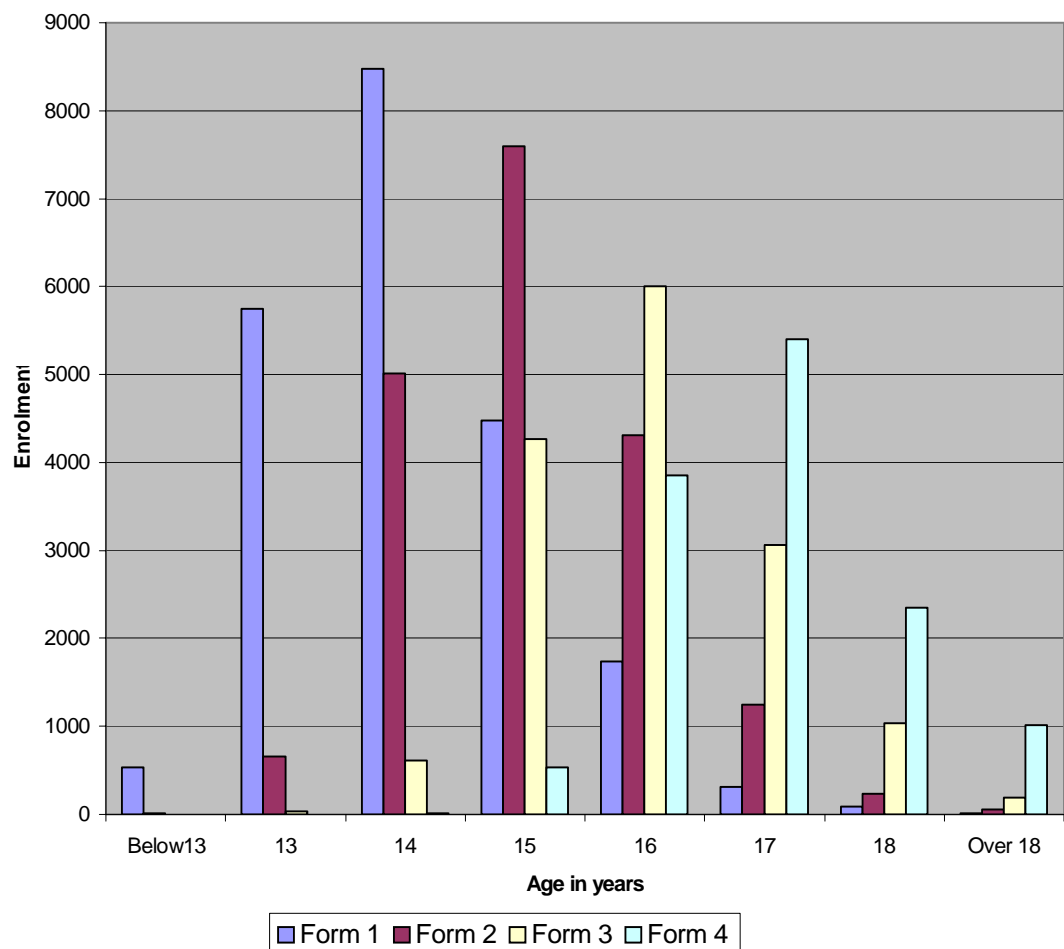


Table 5.4: Enrolment by form and age (female)

The distribution of female students by age and Form was similar to that of male students, with the mode being 14 year olds in Form 1. Like in the distribution for male students there were students in Form 1; 2; 3; and 4 who were 18 years old, and above, constituting a compromise of age specific enrolment ratios (IIEP 2001:210). The prevalence of overage students in Rural Day Secondary Schools could be due to the distance between the students' homes and the schools. From section 5.3.2.2 (g) it emerged that students travel very long distances to school so it is possible that some students delay entering school until they are old enough to walk the distances. It may be that the younger students dropout of school due to failure to cope with the long distances, thus leaving older students in the school system, and that long distances contribute to school dropouts is supported by Gatawa (1998:21) and Dorsey, *et al* (1991:23). There is also a possibility that some parents are not aware of the policy on official school-entry age, as it emerged from section 5.3.1.5 that most rural parents are illiterate and unable to interpret government policy on education.

A more detailed analysis of the enrolment trends is given in Table 5.1 to Table 5.4. This analysis shows enrolment by year, form, age and gender. To portray a more accurate picture of form-by-form analysis the presentation is done in tables, rather than graphically which would give a more generalized picture. Data for each form is given in tabular form and the analysis is given immediately after. The analysis focuses on age and sex comparisons, and in the analysis the absolute figures given in the table have been converted to percentages to show the relative significance of each category.

5.2.1.5 Enrolment by form, year, age and gender

(a) Form 1 enrolment by year, age and gender

Table 5.1: Form 1 enrolment by age and gender for all years

Year	Form	Age in years →	Below 13	13	14	15	16	17	18	Above 18	Total
1999	1	Male	90	772	1501	1092	490	138	34	5	4122
		Female	196	1212	1623	894	279	86	21	1	4312
		Total	286	1984	3124	1986	769	224	55	6	8434
2000	1	Male	91	992	1524	1147	524	154	30	9	4471
		Female	131	1240	1690	847	308	46	7	2	4271
		Total	222	2232	3214	1994	832	200	37	11	8742
2001	1	Male	79	995	1542	1201	624	174	27	7	4649
		Female	101	1104	1722	941	411	59	8	0	4346
		Total	180	2099	3264	2142	1035	233	35	7	8995
2002	1	Male	83	869	1698	1302	603	185	43	9	4792
		Female		1204	1756	924	347	61	23	2	4317
		Total	83	2073	3454	2226	950	246	66	11	9109
2003	1	Male	82	971	1526	1221	589	127	31	7	4554
		Female	112	983	1684	869	393	58	29	1	4129
		Total	194	1954	3210	2090	982	185	60	8	8683
Grand Total			965	10342	16266	10438	4568	1088	253	43	43963

The proportion of male students to female students was 51.4% to 48.6%, showing that more males than females, enrolled for Form 1 in Rural Day Secondary Schools. For the four years under analysis the modal age of students in Form 1 was 14 years, which is the official entry age into secondary school. However 33.3% of the students were over secondary school entry age as they were 15 years old, or more. Actually 3.1% of the students in Form 1 should have been in Form 4, had they entered secondary school at the appropriate age. It is possible these students delayed entering school due to the challenge of distance between home and school, as well as ignorance about the official school-entry age on the part of the parents, as was alluded to by school heads in sections 5.3.1.5 and 5.3.2.2. Of the students who were overage 59.6% were male and 40.4% were female, implying that more males than females delay in entering secondary school. But it is also possible that some of the would be overage female students dropout due to such factors as pregnancy and marriage. The prevalence of overage students in the school system shows that Rural Day Secondary Schools are compromising age specific enrolment ratios, which contribute to the low internal efficiency of the school system (DFID 2001:1). Growth rate, which is also an indicator of the internal efficiency of the school system according to Moyo and Mubengegwi (1995:62-74), was very low. Growth rate was as follows: 2000 (3.7%); 2001 (2.9%); 2002 (1.3%) and 2003 (- 4.7%). This shows that the growth rate of the Rural Day Secondary Schools is declining. Low growth rate

may mean that less of the rural people are accessing secondary education contrary to the provisions of the Ministry of Education Sport and Culture (1995:2) to improve access to secondary education. The reason for a decline in the growth rate may be that fewer people are able to pay fees required in the schools as pointed out by Bray, *et al* (1989:61) and IIEP (2001:216), that resource levels in the household can be a barrier to access to education.

(b) Form 2 enrolment by year, age and gender

Table 5.2: Form 2 enrolment by age and gender for all years

Year	Form	Age in years →	Below 13	13	14	15	16	17	18	Above 18	Total
1999	2	Male		119	708	1310	908	355	89	18	3507
		Female	3	222	1026	1508	679	234	60	6	3738
		Total	3	341	1734	2818	1587	589	149	24	7245
2000	2	Male		85	685	1267	931	364	91	14	3437
		Female		115	1057	1623	848	246	43	12	3944
		Total	0	200	1742	2890	1779	610	134	26	7381
2001	2	Male		82	761	1329	763	347	112	16	3410
		Female	4	123	1120	1381	682	284	58	17	3669
		Total	4	205	1881	2710	1445	631	170	33	7079
2002	2	Male		71	903	1419	949	411	115	20	3888
		Female		96	930	1521	860	291	36	5	3739
		Total	00	167	1833	2940	1809	702	151	25	7627
2003	2	Male		78	822	1438	787	471	107	35	3738
		Female		97	878	1558	1243	189	38	16	4019
		Total	00	175	1700	2996	2030	660	145	51	7757
Grand Total			7	1088	8890	14354	8650	3192	749	159	37089

Of the students registered for Form 2 in the years under study 48.5% were male while 51.5% were female. This pattern is different from the trend in Form 1, where there were more males than females (see Table 5.1). This implies that the survival rate is higher for female students than for male students up to Form 2 in Rural Day Secondary Schools, a trend that is confirmed also by the analysis of survival rates elsewhere in this study (see Tables 5.5; 5.6; 5.7 and 5.10). The reason for this could be that since the majority of the overage students were male (Table 5.1) they drop out of school to look for employment, thus leaving more females at Form 2 level. The tendency to leave school and seek employment is common among male students in rural schools in Zimbabwe (Chronicle of 23 May 2002). The same observation was made by school heads

in section 5.3.2.2 (b) when they pointed out that boys often dropout of school due to “...counter-attractions of gold panning and search for employment in South Africa and Botswana.”

The modal age for students in Form 2 was 15 years, which is the appropriate age for students to be in Form 2, however 34.4 % of students in Form 2 were above the prescribed age limit, perhaps due to the fact that they started school late because of inability to cope with long distances walked to school, or because their parents were ignorant of the official school-entry age. It was pointed out by school managers in section 5.3.1.3 that rural parents are illiterate and do not understand government policy on education. UNICEF (2002:2) argues that household barriers such as family resource-levels, poverty and level of education of families affect participation in education. Of the students overage 54.1% were male while 45.9% were female, confirming an earlier finding that more males than females delay entering secondary school (see Table 5.1). The enrolment of students above the official age limit compromises the quality of education in terms of age specific enrolment ratios (DFID 2001:1). The system is expending resources on students who should be past that benefit, thus reducing benefit to those students in the right age group. Growth rate at Form 2 was low, and as follows 2000 (1.9); 2001 (-5.2); 2002 (9.0) and 2003 (1.7), and this is the effect of the low growth rate in Form 1 (see section 5.2.1.5 (a)).

(c) Form 3 enrolment by year, age and gender

Table 5.3: Form 3 enrolment by age and gender for all years

Year	Form	Age in years →	Below 13	13	14	15	16	17	18	Above 18	Total
1999	3	Male		7	94	613	1038	677	301	95	2825
		Female		1	181	882	1248	584	179	35	3110
		Total	00	8	275	1495	2286	1261	480	130	5935
2000	3	Male			94	692	1238	780	338	95	3237
		Female		1	150	881	1228	640	212	68	3180
		Total	00	1	244	1573	2466	1420	550	163	6417
2001	3	Male			76	673	1023	748	312	80	2912
		Female		27	93	965	1300	616	221	27	3249
		Total	00	27	169	1638	2323	1364	533	107	6161
2002	3	Male			76	657	935	682	334	75	2759
		Female		2	110	933	1102	653	207	36	3043
		Total	00	2	186	1590	2037	1335	541	111	5802
2003	3	Male			64	858	1182	769	284	89	3246
		Female			81	610	1123	571	213	19	2617
		Total	00	00	145	1468	2305	1340	497	108	5863
Grand Total			00	38	1019	7764	11417	6720	2601	619	30178

A total of 30 178 students were registered for Form 3 in the years under study, and 49.6% were male while 50.15 were female, underlying that the survival rate is higher for female students than male students as in Form 1 there were more males than females. Given the poor status of the families it is possible that at this age male students opt to seek employment at the expense of schooling hence there were fewer male students at this level. As reported in The Chronicle of 23 May 2002, and also as alluded to by school heads male students tend to leave school prematurely for gold panning and other forms of employment (see section 5.3.2.2 (b)). UNICEF (2002:2) also argues that among the low economic groups, schooling may be sacrificed for domestic work and household chores. The students' modal age was 16 years, which is the official age by which they should be in Form 3. However 32.9% of these students were over the official age limit, thus reducing the age specific enrolment ratio. Of those overage 56.9% were male, while 43.1% were female, implying that more males delay entering secondary school than females. It could thus be argued that Rural Day Secondary Schools realize low internal efficiency in terms of age specific enrolment ratios (DFID 2001:1; IIEP 1989: 10). Growth rate at Form 3 was generally low, as follows: 2000 (8.1); 2001 (-1.3); 2002 (-5.8) and 2003 (1.1). Low growth rate at Form 3 is a result of low growth rate at both Form 1 and Form 2, which results from such factors as inability to pay school fees (IIEP 2001:216). A low growth rate implies that fewer people are in fact accessing education,

and this is indicative of low internal efficiency of Rural Day Secondary Schools (Moyo & Mubengegwi 1995:62-74; DFID 2001:1).

(d) Form 4 enrolment by year, age and gender

Table 5.4: Form enrolment 4 by age and gender for all years

Year	Form	Age in years →	Below 13	13	14	15	16	17	18	Above 18	Total
1999	4	Male			11	83	524	870	469	269	2226
		Female			6	183	728	962	436	199	2514
		Total	00	00	17	266	1252	1832	905	468	4740
2000	4	Male				58	512	989	577	351	2487
		Female			1	98	842	1209	479	206	2835
		Total	00	00	1	156	1354	2198	1056	557	5322
2001	4	Male				61	615	1033	598	307	2614
		Female			1	83	862	1040	458	195	2639
		Total	00	00	1	144	1477	2073	1056	502	5253
2002	4	Male				55	594	975	607	279	2510
		Female				72	814	1102	507	199	2694
		Total	00	00	00	127	1408	2077	1114	478	5204
2003	4	Male				56	491	877	591	241	2256
		Female				94	609	1094	472	219	2488
		Total	00	00	00	150	1100	1971	1063	460	4744
Grand Total			00	00	19	843	6591	10151	5194	2465	25263

The total number of students enrolled for Form 4 in the years under study was 25 263 of which 47.9% were male and 52.1% were female. At Form 4 the male students are nearing adulthood, and so the probability to sacrifice schooling for employment is higher, hence their proportion in the total enrolment continues to decline. The pressure to work and help sustain their families is higher at this level as observed by UNICEF (2002:2), which argues that household barriers such as family resource-levels, poverty, traditional values and early employment may affect access to schooling of youths. From section 5.3.2.2 another cause for the reduction in the number of students in school is the fact that some students have become heads of families due to the effect of HIV and AIDS, and this responsibility is likely to affect the male students more than the female students, as traditionally males are family heads (UNICEF 2002:1). Male students in this predicament are likely to drop out of school, thus reducing the proportion of male students. Their modal age was 17 years, which is the official age by which students should be in Form 4. However 30.3 % of the students enrolled in Form 4 were above the

official age limit. Of these 56% were male while 44% were female, implying that there were more male students who were overage than female students. The presence of overage students at this level is a direct effect of the prevalence of overage students right from Form 1. According to DFID (2001:1) a system that enrolls students who are past the official school-entry age, has low age-specific enrolment ratios, and low internal efficiency. The system may be serving wrong clients, at the expense of the rightful ones.

5.2.2 Survival rates for different cohorts

Analyses of the survival rates for the cohorts under study were done and are presented in Table 5.5 to Table 5.10. Survival rate is an important indicator of internal efficiency as it shows the retention capacity of the school system (Moyo & Mubengegwi 1995:62-74; DFID 2001:1).

5.2.2.1 Survival rates for the 1999 Form 1 cohort up to Form 4

Table 5.5: Survival rates for 1999 Form 1 cohort up to Form 4

Enrolment in form	1999 F1		2000 F2		2001 F3		2002 F4	
	N	%	N	%	N	%	N	%
Male	4 122	100	3 437	83.4	2 912	70.6	2 510	60.9
Female	4 312	100	3 944	91.5	3 249	75.3	2 694	62.5
Total	8 434	100	7 481	88.7	6 161	73.0	5 204	61.7

The survival rate for male students from Form 1 through Form 4 was 60.9% while that for female students was 62.5%, and the overall survival rate was 61.7%. The biggest fall for the males was between Form 1 and Form 2 (16.4%), while for the females it was between Form 2 and Form 3 (16.2%), and for the overall it was between Form 2 and Form 3 (15.7%). That 38.3% of the cohort did not survive up to Form 4, at least in the standard time of four years, is a significant wastage, which shows low internal efficiency of Rural Day Secondary Schools. Failure of students to survive through the full course of secondary schooling is a result of inability to pay school fees mainly, and social pressures such as pregnancy, poverty and household chores, pressures that are also alluded to by Nziramasanga (1999:303) and UNICEF (2002:2). Given that recorded dropout rates and

repetition rates are far below the actual attrition rates (see Table 5.13) it may be concluded that these students dropped out of school. The high dropout rate was confirmed by school heads who pointed out that dropouts due to failure to pay school fees, long distances travelled by students to school, and other factors was rampant in Rural Day Secondary Schools. This negatively affects the internal efficiency of the school system (Bray *et al* 1986:62; DFID 2001:1).

5.2.2.2 Survival rates for the 2000 Form 1 cohort up to Form 4

Table 5.6: Survival rates for 2000 Form1 cohort up to Form 4

Enrolment in form	2000 F1		2001 F2		2002 F3		2003 F4	
	N	%	N	%	N	%	N	%
Male	4471	100	3410	76.3	2759	61.7	2256	50.5
Female	4271	100	3669	85.9	3043	71.2	2488	58.3
Total	8742	100	7079	81.0	5802	66.4	4744	54.3

The overall survival rate from Form 1 through Form 4 for the 2000 Form 1 cohort was 54.3%, with 50.5% for males and 58.3% for females. Like in the 1999 Form 1 cohort the survival rate was higher for female students than for male students. Survival rates were much lower for the 2000 Form 1 cohort than for the 1999 Form 1 cohort. Like in the 1999 Form 1 cohort the biggest fall for the males was between Form 1 and Form 2 (23.7%), while for the females it was between Form 2 and Form 3 (14.7%). In this cohort only slightly above half of the students who initially enrolled for the course were able to proceed up to Form 4, which shows low internal efficiency of Rural Day Secondary Schools, evidenced by high dropouts and low survival rates (Grisay & Mahlck 1991:5; Gatawa 1998:10; UNICEF 2002:2).

5.2.2.3 Survival rates for the 2001 Form 1 cohort up to Form 3

Table 5.7: Survival rates for 2001 Form 1 cohort up to Form 3

Enrolment in form	2001 F1		2002 F2		2003 F3	
	N	%	N	%	N	%
Male	4649	100	3888	83.6	3246	69.8
Female	4346	100	3739	86.0	2617	60.2
Total	8995	100	7627	84.8	5863	65.2

The survival rate for the 2001 Form 1 cohort was traced up to 2003 when they were in Form 3, as they had not completed Form 4 by the end of the study. The survival rate from Form 1 through Form 3 was 69.8% for males; 60.2% for females and 65.2% for the overall. These rates were lower than the rates for the 1999 Form 1 and 2000 Form 1 cohorts at the same level, and it is possible that if they were traced up to Form 4 the survival rates would ultimately be lower than for those two cohorts at Form 4. Up to Form 3 the survival rates were recorded to be decreasing over the years 1999, 2000 and 2001, as they were 73%; 66.4% and 65.2%, respectively. The continued decline in survival rates may be largely due to the declining economic situation in Zimbabwe as Nziramasanga (1999:303) points out that the chief reason for students leaving school before course completion is economic factors. This view is also upheld by UNICEF (2002:2), which argues that low enrolments in rural schools are a function of school fees, which rural parents cannot afford. This implies that completion rates are likely to continue to decrease which is an indicator of low internal efficiency of Rural Day Secondary Schools.

5.2.2.4 Survival rates for the 1999 Form 2 cohort up to Form 4

Table 5.8: Survival rates for the 1999 Form 2 cohort up to Form

Enrolment in form	1999 F2		2000 F3		2001 F4	
	N	%	N	%	N	%
Male	3507	100	3237	90.7	2614	74.5
Female	3738	100	3180	85.1	2639	70.6
Total	7245	100	6417	88.6	5253	72.5

The survival rate for the 1999 Form 2 cohort was traced up to 2001 when they were in Form 4 and yielded the following results. The survival rate was higher for males (74.5%) than for females (70.60%), and the overall survival rate was 72.5%. For males the drop was higher between Form 3 and Form 4 (16.2%), while for females it was higher between Form 2 and Form 3 (14.9%). This trend emphasizes the low retention capacity of the Rural Day Secondary Schools, an aspect which is an indicator of low internal efficiency resulting in a waste of resources (Natarajan 1993:11; DFID 2001:1; IIEP 2001:216).

5.2.2.5 Survival rates for the 1999 Form 3 cohort up to Form 4

Table 5.9: Survival rates for 1999 Form 3 cohort up to Form 4

Enrolment in form	1999 F3		2000 F4	
	N	%	N	%
Male	2825	100	2487	88.0
Female	3110	100	2835	91.2
Total	5935	100	5322	89.7

The survival rates for the 1999 Form 3 cohort to Form 4 show a higher rate for females than for males, 91.2% and 88.0% respectively with an overall survival rate of 89.7%. Students at Form 4 are nearing adulthood and so for male students the pressure to work and help sustain their poor families is higher at this level, and so the probability to sacrifice schooling for employment is higher hence their survival rate is lower than that of female students. It emerged in section 5.3.2.2 (a) that parents of students in Rural Day Secondary Schools are very poor, and this may force grown up male students to opt to fend for their families as observed by UNICEF (2002:2) that household barriers such as family resource-levels, poverty, traditional values and early employment may affect access to schooling of youths. From section 5.3.2.2 another cause for the reduction in the number of students in school is the fact that some students have become heads of families due to the effect of HIV and AIDS, and this responsibility is likely to affect the male students more than the female students, as traditionally males are family heads (UNICEF 2002:1). Male students in this predicament are likely to dropout of school, thus reducing the survival rate for male students. The low survival rates are a sign of low internal efficiency of the school system (Moyo & Mubengegwi 1995:62-74; Hoy, *et al* 2000:5; DFID 2001:1).

5.2.2.6 Survival rates for the 2002 Form 1 cohort up to Form 2

Table 5.10: Survival rates for 2002 Form 1 cohort up to Form2

Enrolment in form	2002 F1		2003 F2	
	N	%	N	%
Male	4792	100	3738	78.0
Female	4317	100	4019	93.1
Total	9109	100	7757	85.2

The 2002 Form 1 cohort was traced only up to when they were in Form 2 in 2003 (end of data collection point for the study), and yielded the following pattern. The survival rate for female students was 93.1%, while for male students it was 78.0%. The overall survival rate was 85.2%, indicating a low retention capacity of the Rural Day Secondary Schools where almost 15% of the cohort is lost by the end of the first year of secondary schooling, thus reducing the expected number of graduates. This is indicative of low internal efficiency of Rural Day Secondary Schools (DFID 2000:1; Moyo & Mubengegwi 1995:62-74). The reason for this could be attributed to economic factors, which tend to impact negatively on access to schooling (Nziramanga 1999:303).

The survival rate of students in Rural Day Secondary Schools was low for the years under study. For instance, for the 1999 Form 1 and 2000 Form1 cohorts the final survival rate was 61.7% and 54.3%. It means 38.3% and 45.7% of students who entered Form 1 in 1999 and 2000 respectively did not get to Form 4, and this is indicative of low internal efficiency. This is consistent with the assertion by Gatawa (1998:10) that, “While developing countries have done remarkably well in terms of extending education to an appreciably large percentage of their school going population, school performance as measured by dropouts, examination pass rates...has not been encouraging.” Bray *et al* (1989:61) and Nziramanga (1999:303) hold a similar view when they argue that no African country is nearing universal secondary education despite concerted efforts and heavy investments to do so, and dropout rates tend to be high among rural communities.

5.2.3 Analysis of recorded dropouts

5.2.3.1 Dropouts by form, year, reason, and gender

Table 5.11: Recorded dropouts by reason, gender and year

		A		B	C	D	E		Total
Year	Form	M	F	F	F	F	M	F	
1999	1	63	49				4	5	121
	2	79	71				3	12	165
	3	85	94				7	4	190
	4	89	74				8	11	182
	Total	316	288				22	32	658
2000	1	68	86	2	1		11	1	169
	2	83	102	3			5	9	202
	3	113	100	20			21	22	276
	4	116	88	24	4		20	15	267
	Total	380	376	49	5		57	47	914
2001	1	71	82				6	9	168
	2	96	104	3			38	25	266
	3	75	63	12	1		32	47	230
	4	80	81	20			21	22	224
	Total	322	330	35	1		97	103	888
2002	1	86	70				4	11	171
	2	121	136	3		3	9	13	285
	3	88	107	21	5		19	23	263
	4	88	112	26	6		34	22	288
	Total	383	425	50	11	3	66	69	1007
2003	1	90	81	1			19	7	198
	2	100	103	15	1		24	22	265
	3	111	116	23	3		21	17	291
	4	59	45	24	1		33	19	181
	Total	360	345	63	5		97	65	935
Grand Total		1761	1764	197	22	3	339	316	4402

Key: A-School fees B- Pregnancy C- Marriage D-Death E-Unexplained

The recorded dropouts increased from 1999 to 2000 by 38.95%; and then decreased in 2001 by 2.8%. The significant increase in the number of dropouts between 1999 and 2000 may have been due to the drought, which left many of the peasant parents with no agricultural produce to sell to raise school fees. The effect of the drought on the education of rural communities is also confirmed by The Chronicle of 15 February 2001. They then increased by 13.45% in 2002, and further decreased by 7.1% in 2003. Of the total students recorded to have dropped out of school in the years under study 47.7% were male, while 52.3% were female. But the general trend established in the study is that the survival rate is higher for female students. Given the prevalence of unaccounted for students it is possible that the dropout rate was higher for male students, only these

were not recorded as according to Table 5.13, 22.3% of school enrolment attrition was not accounted for. Actually the 22.3% unaccounted for students constitute 75.4% of total attrition, so it is possible that a significant portion of male dropouts is hidden in the unaccounted for attrition (Table 5.13).

Of the total dropouts recorded 80.1% were attributed to failure to pay school fees; 14.9% were unexplained; 4.5% were due to pregnancy; and 0.5% were due to marriage. The high number of recorded dropouts due to failure to pay school fees is consistent with findings by IIEP (2001:216) that dropouts may be caused by examination and school fees which rural parents cannot afford. The problem of schoolgirl pregnancy, which was alluded to by school heads in the personal interviews (see section 5.3.2) is also evident from this quantitative analysis.

Dropouts were highest in Form 3 as 28.5% of the recorded dropouts were in Form 3. The second highest affected level was Form 2, which accounted for 26.8%, the third was Form 4, which accounted for 25.9% and the least affected was Form 1 with 18.8%. Dropout rates are almost evenly spread across all levels of schooling in Rural Day Secondary Schools. Figure 5.5 gives a graphic representation of the spread of recorded dropouts.

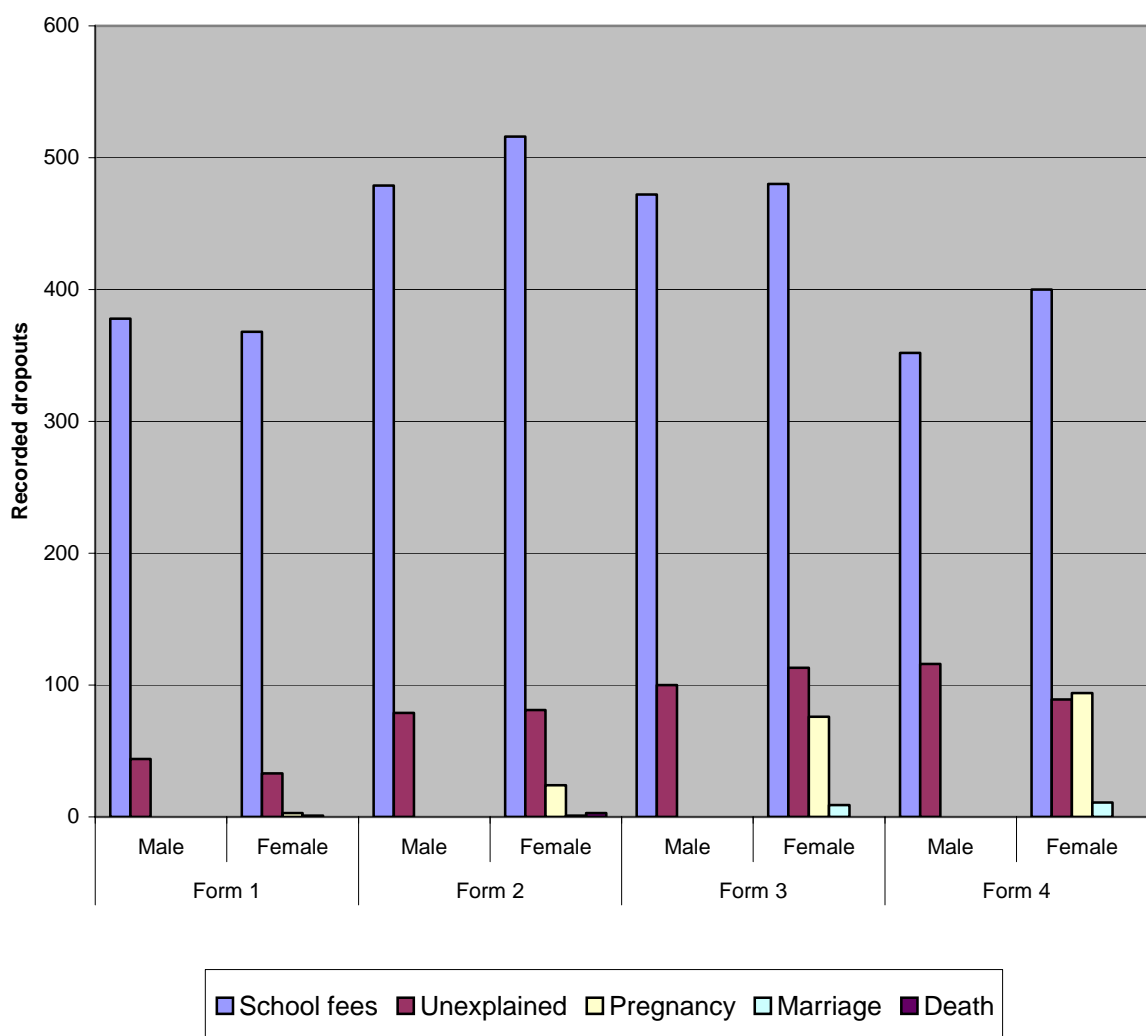


Figure 5.5: Distribution of recorded dropouts by form, reason and gender

5.2.4 Analysis of recorded repeaters

5.2.4.1 Repeaters by form, year, and gender

Data on students who repeated classes in the period under study was captured from the form ED 46 B (1). It is summarized in Table 5.12, to give a detailed account of the repetition trends. The data is further reduced to bar graphs to show the distribution of repeaters by form (Figure 5.6) and the distribution of repeaters by form, year and gender.

Table 5.12: Repeaters by year, form and gender

Year	Sex	Form				
		1	2	3	4	Total
1999	Male	15	2	16	123	156
	Female	5	11	21	137	174
2000	Male	25	30	89	139	283
	Female	15	16	164	148	343
2001	Male	16	27	96	120	259
	Female	12	20	91	125	248
2002	Male	18	23	54	154	249
	Female	13	19	75	180	287
2003	Male	9	21	80	145	255
	Female	17	24	76	156	273
Total		145	193	762	1 427	2 527

The trend in the five years under study showed that more females, than males were recorded to have repeated classes. In fact it is only for 2001 that there were more males than females repeating. Of all the recorded repeaters males constituted 47.6% while females constituted 52.4%. This trend is consistent with the finding that generally the survival rate is higher for females than for males. Because females tend to stay longer at school they are more prone to repeating classes than males, who dropout. One reason why females may have the opportunity to repeat classes is because there is traditionally less pressure for them to sacrifice schooling, and take up family responsibilities, as observed by UNICEF (2002:2) that social and traditional values affect schooling patterns. From Table 5.14(a) and Table 5.14(b) it emerged that more male students than female students pass the “O” level examinations, so it is possible that more female students come back to repeat after failing the examinations. Repeating after failing the examination was cited as one of the chief drivers of repetition rates (section 5.3.2.2 (e)).

Analysis of repeaters by form shows that the number of students repeating a level increases with the level of schooling. Of the 2 527 repeaters recorded for the years under study, 5.7% were in Form 1; 7.6% were in Form 2; 30.2% were in Form 3 and 56.5% were in Form 4. This is consistent with the views of school heads, and school managers and some senior teachers that repetition in Rural Day Secondary Schools is higher at

Form 3 and Form 4, as those students who will have failed the “O” level examinations the previous year return to repeat either Form 3 or Form 4 (see section 5.3.2.2 (e)). Of the 61 883 students enrolled in the Rural Day Secondary Schools in the years under study at least 4.1% repeated a class. It is possible the percentage is much bigger as it became evident during the analysis of documents that there was significant under reporting of students falling off their cohorts. Repetition constitutes inefficiency (Bray, *et al* 1986:62; IIEP 2001:216), and if it is high as is the case in this study, it leads to low internal efficiency of Rural Day Secondary Schools. High repetition rates, which are prevalent among the low-income groups, are a threat to issues of internal efficiency of the school system (Bray *et al* 1986:83; IIEP 2001:216; DFID 2001:1). Repetition also reduces the completion rates for any given cohort, which further compromises the internal efficiency of Rural Day Secondary Schools (DFID 2001:1). The distribution of repeaters is shown graphically in Figure 5.6 and Figure 5.7.

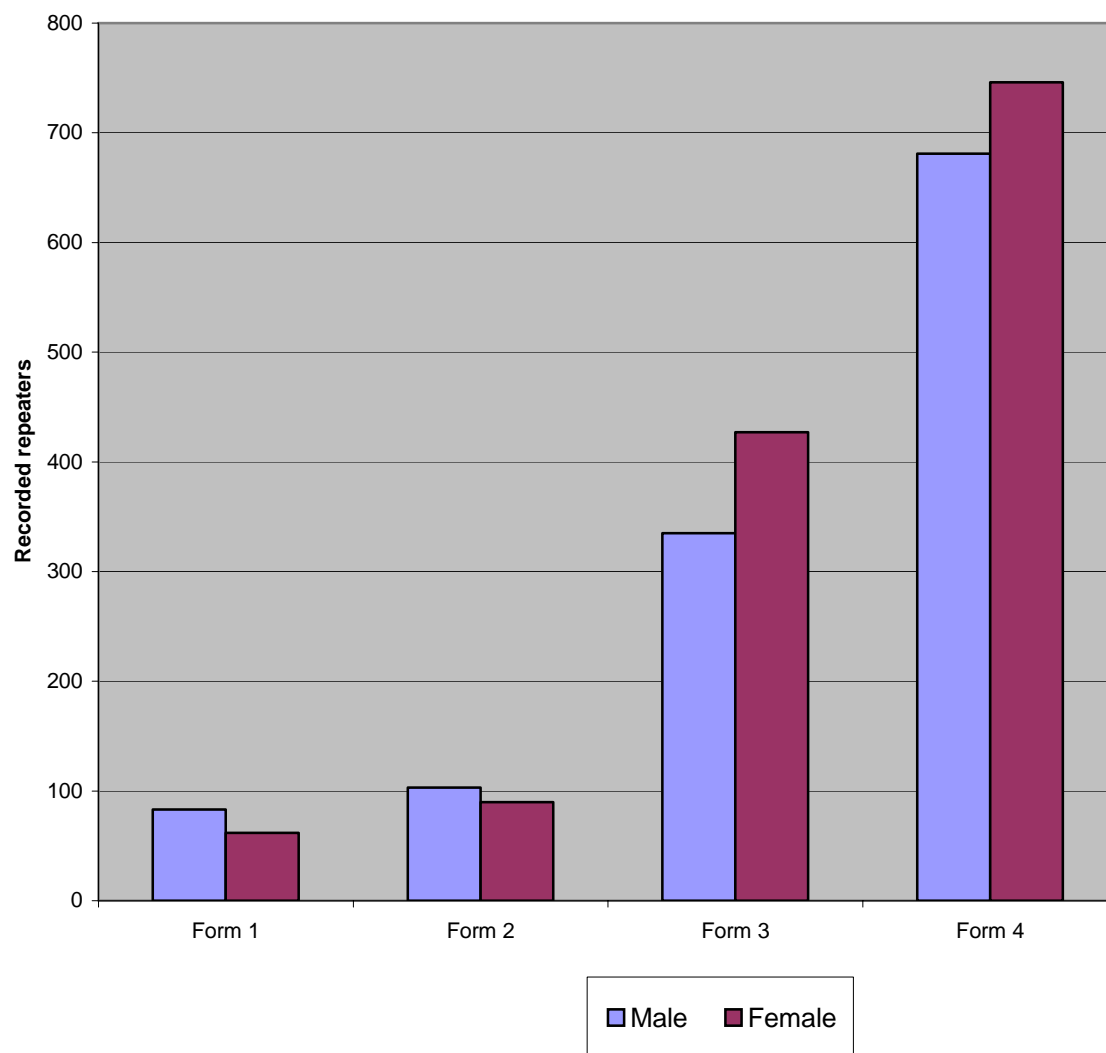


Figure 5.6 Distribution of recorded repeaters by form

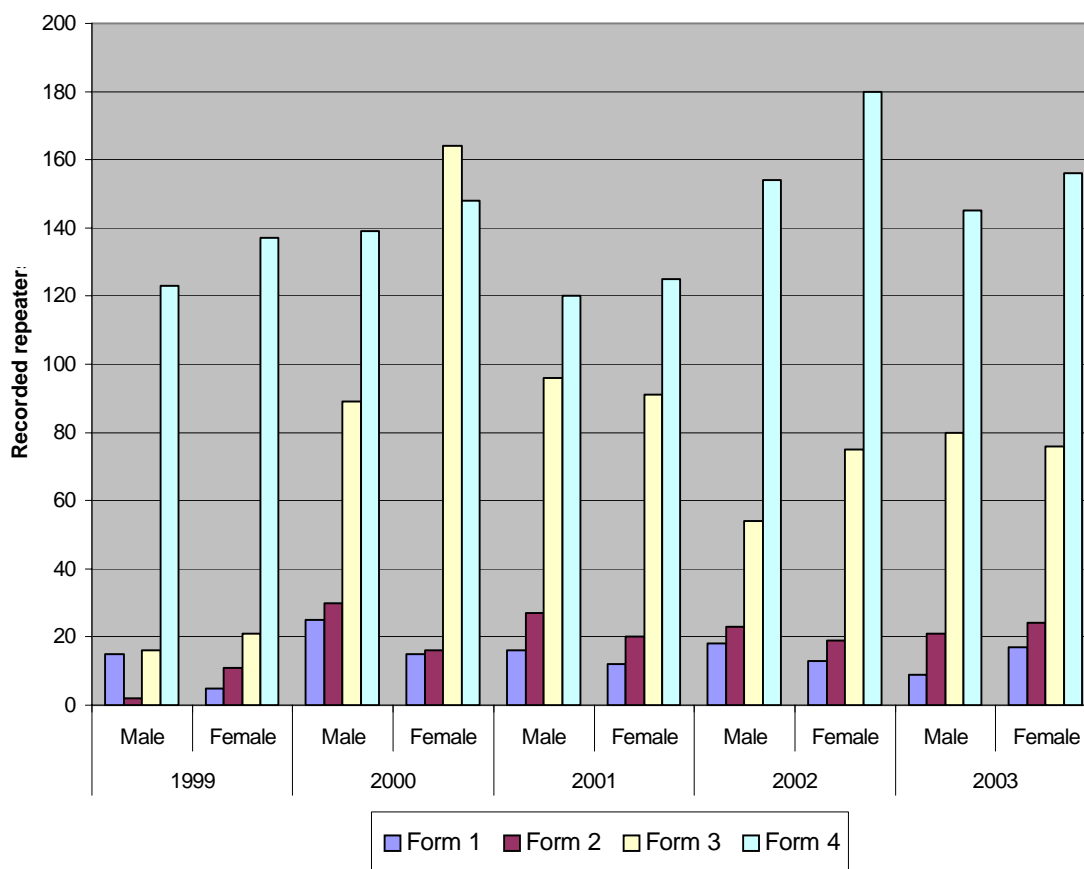


Figure 5.7: Distribution of repeaters by year, form and gender

A comparison of survival rates, recorded dropouts and repeaters showed that there was a large number of students who were lost in the system, but were not accounted for. The attrition rate for each cohort did not tally with the students discounted through dropout and repetition in the records. A summary of students who were lost in the system, but were not officially accounted for is given below.

5.2.5 Analysis of unaccounted for students by cohort, and gender

This section gives an analysis of the number of students who were not accounted for in the records that served as data sources for the study. The total attrition was obtained by subtracting the enrolment residue after survival rate from the opening enrolment for that cohort.

Table 5.13: Summary of unaccounted for students

Cohort		Total attrition at end of study period		Reported repeaters and dropouts		Unaccounted for	
		N	%	N	%	N	%
1999 Form 1	Male	1612	39.1	368	8.9	1244	30.2
	Female	1618	37.5	401	9.3	1217	28.2
1999 Form 2	Male	893	25.5	342	9.8	551	15.7
	Female	1099	29.4	332	8.9	767	20.5
1999 Form 3	Male	338	12.0	181	6.4	157	5.6
	Female	275	8.8	262	8.4	13	0.4
2000 Form 1	Male	2215	49.5	429	9.6	1786	39.9
	Female	1783	41.7	488	11.4	1295	30.3
2001 Form 1	Male	1403	30.2	246	5.3	1157	24.9
	Female	1729	39.8	280	6.4	1449	33.4
2002 Form 1	Male	1054	22.0	99	2.1	955	19.9
	Female	298	6.9	98	2.3	200	4.6
Grand total		14317	29.5	3526	7.3	10791	22.3

For this analysis the cohort 1999 Form 4, was not included as it completed in the first year covered by the study so no survival tracing was possible. The cohort 2003 Form 1 was also not included as the cut off point for the study was 2003 before they could move to Form 2 to allow for survival tracing.

Of the 48 460 students enrolled in the cohorts indicated in Table 5.13, 29.5% did not complete the school course, at least in the cohorts in which they were initially in during the years covered by the study. The reasons for this low survival rate are varied. The chief reason is the inability to pay school fees, as evidenced in Table 5.11. This trend is supported by IIEP (2001:216), which points out that dropout may be caused by examination and school fees which rural parents cannot afford. Nziramasanga (1999:303) also alludes to the same notion when he points out that economic factors account for a large proportion of dropout in rural schools. From section 5.3.2.2 and Table 5.11 it emerged that school enrolment attrition was also due pregnancy and marriages and students who disappear without explanation. These causes are related to household barriers to education (UNICEF 2002:2). According to official records 7.3% were accounted for through a combination of repetition and dropouts, while 22.3% were not accounted for. In almost all the cases the number of unaccounted for students far exceeds the number of students recorded to have been lost in a cohort through either repetition or dropout. The failure to account for all students who leave the school system may be due

to lack of supervision of Rural Day Secondary Schools by Education Officers, a reality observed by Grauwe (2001:103). There could also be a problem with the administration of the instruments for accounting for students, for instance at what time during the school year are the instruments administered. But accounting for students is also made difficult by the fact that some students just disappear from school without explanation a situation alluded to by school heads (section 5.3.2.2 (b)). It means therefore that school records as a tool for maintaining measures of the quality of education of Rural Day Secondary Schools are not quite reliable and this defeats efforts to create quality as quality depends, to an extent, on accurate statistical data (Smit & Cronje 1997:5). The 22.3% of the students who were not accounted for constitute 75.4% of the attrition rate, and this is wastage that cannot be retrieved, as no information is available about them. Without adequate information it would be difficult, if not impossible, to rectify the problem of the schools' inability to retain students.

5.2.6 Analysis of “O” level examination pass rates

Table 5.14 (a): “O” level examination pass rates by gender and year

YEAR		Initial Form 4 enrolment		Candidates who wrote the examination		Candidates who passed 5 or more subjects including English language		
		N	%	N	%	N	% of candidature	% of initial enrolment
1999	Male	2226	100	1779	79.9	266	15.0	12
	Female	2514	100	1727	68.7	257	14.9	10.2
	Total	4740		3506	74.0	523	14.9	11.0
2000	Male	2487	100	2119	85.2	217	10.2	8.7
	Female	2835	100	2438	86.0	164	6.7	5.8
	Total	5322		4557	85.6	381	8.4	7.2
2001	Male	2614	100	2362	90.4	236	10	9.0
	Female	2639	100	2215	84.0	163	7.4	6.2
	Total	5253		4577	87.1	399	8.7	7.6
2002	Male	2510	100	1965	78.3	225	11.5	9.0
	Female	2694	100	2094	77.7	166	7.9	6.2
	Total	5204		4059	78.0	391	9.6	7.5
2003	Male	2256	100	2144	95.0	177	8.3	7.8
	Female	2488	100	2309	92.8	153	6.6	6.1
	Total	4744	100	4453	93.9	330	7.4	7.0

Table 5.14 (b): Means and standard deviations of pass rates for the period under study

Measure	Male	Female	Overall
Mean	11%	8.7%	9.8%
Standard deviation	2.2	3.1	2.6

Not all students who initially enrolled in Form 4 finally wrote the “O” level examinations. For the five years under study an average of 83.7% of students who enrolled for Form 4 finally managed to write the examinations per year. It means 16.28% dropped out for various reasons, a situation alluded to by school heads and school managers and senior teachers during discussions, and also by the recorded prevalence of dropouts at Form 4 (see Table 5.11). Gatawa (1998:10) also argues that, while developing countries have done remarkably well in terms of extending education to an appreciably large percentage of their school going population, “...school performance, as measured by dropouts and examination results...has not been encouraging.” The reason for students failing to write the “O” level examinations could largely be attributed to failure to pay examination fees as evidenced in Table 5.11, which shows that the most significant cause of dropouts is failure to pay fees. The same notion is shared by IIEP (2001:216), which argues that dropouts may be caused, by examination fees, which rural parents cannot afford.

The mean pass rate for male students was 11%, with a standard deviation of 2.2 and this was higher than the mean pass rate for females, which was 8.7% with a standard deviation of 3.1. This means there was less variation in the pass rates for male students than in the pass rates for female students. In each of the five years the pass rate for males was higher than that of females, and it was concluded that males perform better than females in the “O” level examinations in Rural Day Secondary Schools. The overall mean pass rate for the five years was 9.8%, which is lower than the national mean pass rate of 14.6% (Maramba 2001:19). Rural Day Secondary Schools therefore perform worse than the other school types in the “O” level examinations. This is also confirmed by the fact that in the “O” level examination ratings for 2000 there were no Rural Day Secondary Schools in the top 150 schools (Chronicle 19/02/01). Dorsey *et al* (1991:25)

and Mutumbuka (1986:116) also concur with this finding when they say rural schools have the poorest examination results. Over the years the pass rates have not been improving, but instead they were on the decline, more evidently for female students, contrary to the finding by Ross and Mahlck (1990:20) that schools in rural districts often change their levels of achievement after a period of five years.

The low pass rates may be due to reasons such as lack of resources in the schools, lack of teacher motivation, and negative attitudes towards school by the students as pointed out by school heads in section 5.3.2.2. The impact of the lack of resources is corroborated by Gatawa (1998:24), who says the drive for quantity after 1980 has not been matched by an equal investment in quality. The achievement of the students may also be affected by fatigue emanating from the long distances they walk to school as pointed out by school managers and school heads in sections 5.3.1 and 5.3.2. Another factor, which may be responsible for the low pass rates is the calibre of students entering Rural Day Schools, as school heads argued that the schools enrol students who would have failed the grade 7 examinations. This view is supported by Nyagura (1991:52) and Nziramasanga (1999:304) who posit that rural schools performed badly in the “O” level examinations, partly because they admitted students with low achievement from primary school.

Figure 5.8 shows a time series of pass rates for male students and female students for the years covered by the study. The pass rates were highest in 1999 and generally fell thereafter. The fall of the graph was much steeper for female students.

The low pass rates recorded are consistent with the views of school heads that low pass rates are indicative of the low quality of education of Rural Day Secondary Schools. IIEP (2001:217) says passing the “O” level examinations is a requirement for sixth form selection and tertiary education as well as career pursuit, so on average more than 90% of students graduating from Rural Day Secondary Schools may be disadvantaged in this respect as the average pass rate is 9.8% (Table 5.14 (b)). Commenting on the quality of education of rural schools Books (1996:3) observes that, rural schools, “...are under funded and provide a low-quality education to those who end up as cheap labour.” This

is consistent with the view held by Gatawa (1998:10) that, “While developing countries have done remarkably well in terms of extending education to an appreciably large percentage of their school going population, school performance, as measured by dropouts and examination results...has not been encouraging.”

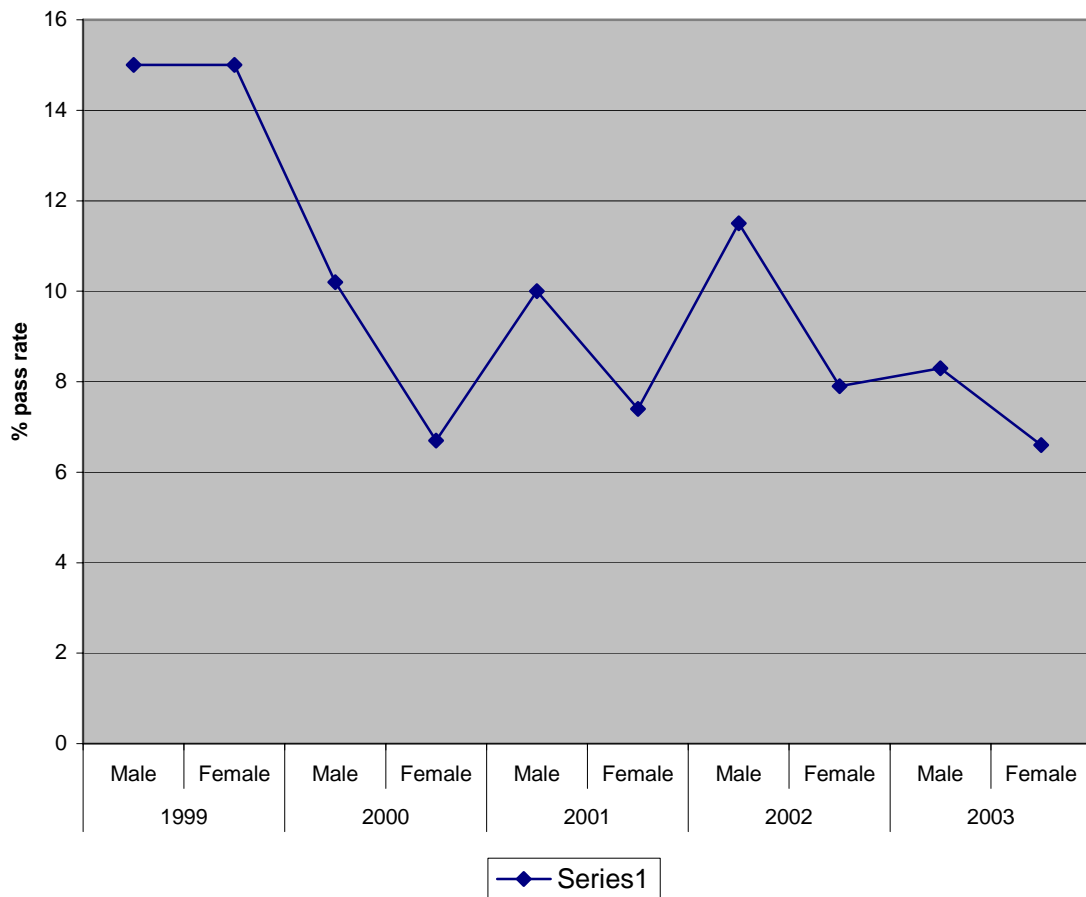


Figure 5.8: “O” level examination pass rates for 1999 to 2003

5.3 FINDINGS FROM THE QUALITATIVE STUDY

The qualitative phase of the study was used to address research questions 3 and 4, which were:

3. What are school managers' (including some senior teachers) views of the programmes that were established to improve the quality of education of Rural Day Secondary Schools?
4. What strategies do school heads think can be implemented to improve the quality of education of Rural Day Secondary Schools?

For this phase of the study a convenient sample of five schools was selected based on the assertion by McMillan and Schumacher (1997:169) that in convenience sampling subjects can be selected on the basis of being accessible or expedient. From each of the selected five schools, six school managers (including senior teachers), who had taught for at least five years, were purposefully selected to ensure information rich-participants, who then participated in five focus groups to address question research 3. A focus group was conducted with the subjects in each school and lasted about one hour fifteen minutes. Personal interviews were conducted with the school heads of the five selected schools to address research question 4. Each personal interview lasted at least forty-five minutes. The qualifications and sex of the school managers and school heads who participated in focus groups and personal interviews are given in the tables below.

Table 5.15: Qualifications and sex of focus groups participants

Qualification	Degree	Diploma	Total
Male	11	8	19
Female	5	6	11
Total	16	14	30

Table 5.16: Qualifications and sex of school heads who were interviewed

Qualification	First degree	Masters degree	Total
Male	1	2	3
Female	2	0	2
Total	3	2	5

5.3.1 Improving the quality of education of Rural Day Secondary Schools

Research question 3 sought to analyse school managers' (including some senior teachers) views of the programmes that were established to improve the quality of

education of Rural Day Secondary Schools. The programmes are (BSP (Z); ZIMSEC; the Clients' Charter; the Quality Assurance Division and SDCs. The views of the managers on each programme are discussed under the following themes (see section 4.3.2.3)

- Programme worth and expectations;
- Programme achievements;
- Programme challenges; and
- The way forward.

The points under each theme are discussed in order of the frequencies with which they were raised during the focus groups. The more frequent ones are treated first and the less frequent ones are treated last.

5.3.1.1 BSP (Z)

a. Programme worth and expectations

The participants viewed BSP (Z) as a sound programme with the potential to enhance the quality of education of Rural Day Secondary Schools if it is implemented and managed well. One participant had this to say about the programme, "I feel the idea is noble. The idea of trying to improve the quality of education in schools through this programme is okay, but I question the implementation part of it." A participant from a different focus group concurred by saying, "I think BSP (Z) is a noble idea because, looking at what their activities are, they can help to develop teachers. It's a programme that is meant to improve the quality of the teachers and also to assist students. It tries to involve all stakeholders." A third participant echoed the same view, and said, "It is surely a sound programme, but its management must improve. It helps schools to share resources and ideas so that they can perform better." If the programme can improve the quality of the teachers, then the quality of education is likely to go up as Gattis (1996:17) argues that quality is about people.

Through the programme teaching and learning resources can be mobilized and shared by the schools, and this reduces the cost of resources per school. A participant observed that BSP(Z), "...helps schools to share resources and ideas so that they can perform better." The need to share resources was re-emphasized by a participant in another focus group who pointed out that resources that can be shared include library facilities, as it is, "...expensive for each school to construct its own viable library and procure enough and appropriate reading materials." Schools can also share both ideas and experiences and enhance their performance. The BSP (Z) concept is perceived to seek to involve all stakeholders, that is, school heads, managers, teachers, the community and students and it carries elements of Deming's (1986:24-86) view of encouraging education and development for everyone.

BSP (Z) was also viewed as a programme, which could facilitate research, by teachers as one participant remarked, "...they should carry out research and find out what problems are really faced by these Rural Day Secondary Schools." Another one supported the research focus, and added, "It should provide resource centres where teachers will be doing their research. This will improve the knowledge of teachers." The focus of research could be on such aspects as improvement of teaching strategies, student discipline and creation of new knowledge to be fed forward to future curriculum design. Experts can also be brought in to assist teachers to develop their capacity in research. Teachers can also design useful learning materials that would fill the gap created by the shortage of textbooks, said some participants. Thus teachers would be contributing to the world of knowledge, which is an indicator of the quality of education (Natarajan 1993:11).

BSP (Z) centres were viewed as having the capacity to serve as information distribution centres for rural schools that are remote and far away from post offices. Circulars from the ministry and other departments can be left at the BSP (Z) centres and schools can collect them physically as one participant observed that, "The other role played by the BSP (Z) is that it coordinates the schools. For example you find that there are some circulars that are supposed to reach far schools where there are no post offices. So BSP (Z) helps to send those circulars." This arrangement helps to save both time and money.

b. Programme achievements

The most alluded to achievement of BSP (Z) was the introduction of awards for excelling schools and teachers, as was pointed out by a participant who said, "...like these awards we are having here, they motivate teachers, and they feel very confident to get awards." A similar sentiment was, echoed by another participant, who had this to say about the awards, "Going back to these awards, when you look at the motivation aspect, I think the awards are quite good."

Once in a year there is an Awards Day where excellence in school management, academic performance and core-curricula activities is rewarded through prizes. The awards have enhanced motivation and competition among both teachers and students as evidenced by this quotation from one participant, "...the introduction of awards has introduced competition between schools. Teachers and pupils now work harder to try and get the awards." The awards approximate the recognition phase in Crosby's Zero Defects Approach to quality (Morgan & Murgatroyd 1994:193-194; Sallis 1996:48-50).

It also came out that BSP (Z) had successfully held workshops to improve teachers' skills as well as management capacity for school heads. Explaining that workshops have been used to develop teachers a participant said, "Workshops have been held for teachers, and awards have been given for good performance. This has helped to motivate teachers and children. There is now competition in the schools." It has introduced an element of teamwork and team spirit among neighbouring schools. Teachers and school heads have also been trained on how to report the progress they make regularly. Literature on Juran's Project Management approach to quality management supports that this is a key component of quality management (Sallis 1996:46).

In the district resource centres computers and photocopiers have been installed. This has made it easy for schools to produce some of their learning materials. "They brought computer programmes whereby we work with these centres so that the community should

benefit. The computers are mainly benefiting the schools,” said one school manager. These facilities have also made it possible for schools in the same clusters to set and administer common continuous assessment tests at the end of term, or end of year. Apart from making the production of tests cheaper, this has enhanced the comparability of standards among schools.

There has also been a noticeable increase in the number of students passing the “O” level examinations since the inception of the programme. “We can say the results have improved, but it’s not 100%,” said one participant referring to “O” level examination pass rates. This view was also upheld by another participant who said, “The pass rates have gone up numerically...” There are no longer cases of schools that fail to have even one student passing, like used to happen in the past. This was attributed to the collaboration among schools.

c. Programme challenges

In spite of the achievements discussed in the preceding paragraphs, the participants had different views on the challenges facing BSP (Z), as observed by a participant who said, “There are quite a number of issues on the positive side. But on the negative side there is a lot too. BSP (Z) does not assist our pupils in the remote rural schools.” First, the programme has failed to reach out to the very remote schools, a view supported by a participant who observed that, “Our pupils hardly access the district centre because of distance.” Instead the programme has tended to benefit the more accessible schools that have fewer problems. Teachers from some remote schools do not participate in the programme, and one participant supported this view by saying, “It’s hard for me to say anything about the programme because we are not exposed to that programme. I’ve been teaching in this school for four years but we have not heard much about this programme.” The resources at the district centres therefore do not benefit these schools. Another participant reiterated, “I believe the centre is just far away from us, and the rest of the people who must use it.” It was thus concluded that BSP (Z) was not accessible to remote schools.

There was also a perceived lack of accountability in the programme as some participants claimed that their schools contributed money to BSP (Z), but they were not sure what it was used for, as one school manager commented, “Well, what I know is that we have contributed some monies on several occasions towards the programme and we do not know what they were for.” School managers in such schools felt that their schools were robbed of the money, as they do not get value for it. In support for the call for accountability another manager said, “If they collect moneys they must account for them always, and the schools must be seen to be benefiting from those moneys. For now our school feels robbed of the money it pays to the programme.” In support of the same concerns another participant had this to say, “You find that schools are paying a lot of monies to BSP (Z) and those moneys are doing nothing to the child who is the core business”.

There were also concerns about the criteria used to employ BSP (Z) resource persons as participants claimed that at times lowly qualified and inexperienced people were appointed for the jobs. “It is not clear how resource persons are appointed. At times people with no good qualifications are appointed when they also lack experience,” claimed a participant. Another participant retorted in support of the observation, “You realize that a Form 1 teacher has been appointed to mark a Form 4, English Paper 2, at the exclusion of those who are more qualified. Preference should be given to those who are more qualified and experienced.” It was felt that this compromised the quality thrust. The lack of transparency may hinder the creation of constancy of purpose for improvement of product and service (Deming 1986:24-86). Yet the creation of constancy of purpose for improvement of product and service is a critical aspect for the management of quality.

The programme still has not realized enough resources to ensure the quality of education of Rural Day Secondary Schools. The resources that are in short supply include personnel appropriately trained in quality management, computers for the cluster centres, and library books in cluster centres. In one cluster resource centre that was supposed to

service more than one thousand teachers and students, a participant claimed there were between ten and fifteen books, whose relevance even was questionable. The lack of resources impedes the quality of education of Rural Day Secondary Schools as the European Trade Union Committee on Education General Assembly 2001 (2000:1) and Moyo and Mubengegwi (1995:62-74) posit that availability of resources is critical for instituting quality of education.

While the introduction of awards for excellence was seen as a positive move, the participants felt that there was unfair competition in that Rural Day Secondary Schools, which are under-resourced and enroll a majority of students who will have failed the Grade 7 examinations compete with established schools, which have enough resources, and enroll only students who will have passed the Grade 7 examinations well. This concern was, summarized by a school manager who said:

The other issue is the manner in which awards, are given in the district, by BSP (Z). Actually the Rural Day Secondary Schools are disadvantaged even before they have started writing the examinations. These schools which do not have resources, and enroll even pupils who fail at primary school are forced to compete with well resourced schools which only take students who would have passed well at primary school. If we were to group the schools into, maybe, day schools, and boarding schools that would encourage all schools to work hard.

Raising the same concern another participant observed:

It is a good idea, but rural schools must be graded separately for the awards. It is unfair to let them compete with boarding and urban schools because they are short of resources and take children who are academically weaker, from primary school. We are supposed to be part of BSP (Z) and we must be invited to contribute. They tend to select from boarding schools and leave those in rural schools, that is where the programme is weak.

As a result the Rural Day Secondary Schools lose out on the awards even before the tests are written as the majority of their students are academically weak and the probability that they will perform better than their counterparts from established schools is very low. This may destroy the competitive spirit of the Rural Day Secondary Schools and lead to

frustration. Participants also claimed there was lack of transparency in the distribution of the awards, and one noted, “On the awards side there should be some transparency.”

d. The way forward

A number of strategies were suggested by the participants to try and improve the operations of BSP (Z), and make it more effective in addressing the problems faced by Rural Day Secondary Schools. The strategies are described below.

- Foremost there is need for the programme to adopt a highly participatory approach to doing business, as observed by a participant who said, “They should consult widely before they embark on their programmes.” Another participant emphasised the same view as follows:

The first thing is to involve all the stakeholders and the teachers. We must start at the school level and go to the departments. Each department will have an executive from the school, and then from the HODs they will have one person to represent the school in the cluster.

BSP (Z) must have structures that start at the school level with school representatives of all schools, then, have cluster representatives, district representatives, regional representatives and finally a national board as advocated in the organizational structure (see Figure 3.1). This requirement was supported by a school manager, who said, “All schools must be represented in BSP (Z). We do not have a representative at the moment and we do not get information to help our pupils.” The community must also be involved meaningfully as they are the key stakeholders, according to participants. The resource persons must travel to schools to consult with teachers and parents. This way more people will be part of the quality team, at different levels. Quality teams are critical for quality management according to Crosby’s Zero Defects Approach to quality (Morgan & Murgatroyd 1994:193-194). The teachers who are at the forefront in educating the students must play a leading role in these teams. Reiterating the need for a participatory approach one participant said, “They must

consult widely before they embark on programmes, or they should carry out research and find out what problems are really faced by these Rural Day Secondary Schools.”

- Another strategy is for BSP (Z) to be more accountable and transparent in transacting business, a view held by a participant who said, “If they collect moneys they must account for them always and the schools must be seen to be benefiting from those monies. For now our school feels robbed of the money it pays to the programme.” This was, supported by a school manager, who pointed out that, “BSP (Z) levies schools to get money, so they must plough the money back to the schools. Right now we are not sure what the money is used for. We just continue to pay.” The participants stressed the need to make sure that all schools at least benefit from the money they pay, even if they are remote. This could be achieved through preparing, and distributing regular financial statements, and progress reports to all schools. According to Juran’s Project Management Model reporting progress is important in building quality (Sallis 1996:46).
- The lack of resources for BSP (Z) is a result of insufficient funding as one participant noted, “I think BSP (Z) has tried to address the problems in education, but they do not seem to have enough funds,” while another added, “Maybe there could be problems that they do not have enough funds.” The strategy to deal with this problem is for government and the corporate world to increase funding to BSP (Z). “I think the ministry should also chip in and assist BSP (Z) financially, instead of expecting only schools to contribute monies. The corporate world should also be involved in raising money as they also benefit from the school products,” suggested one participant. His view was, corroborated by another participant who posited that, “Government must also budget substantial amounts of money for the project rather than leave it to be financed by the poor communities alone. Nor should the programme try to rely on donations every time.” Increased funding would help to reduce school dropouts, as students’ fees would be subsidized, the participants argued. Natarajan (1993:11); Moyo and

Mubengegwi (1995:62-74) and DFID (2001:1) concur that school dropouts are a waste of resources, and an indicator of low internal efficiency of the school system and need to be curtailed.

- A strategy to achieve equity in the use of BSP (Z) resources is the development of cluster resource centres close to schools so that even remote schools can benefit from the programme. In support of this strategy one participant said, “It would be better in a situation whereby we have different centres at cluster level. This would help our students to benefit.” Supporting the need to have cluster centres close to schools another participant said, “The other thing is if we are to survive we need libraries in cluster centres, that are close to our schools.” Resources and decision-making capacity ought to be decentralized to the grassroots for greater impact.
- Another strategy is for BSP (Z) to organize teachers into research teams that can identify and solve problems affecting the teaching-learning process. One participant pointed out that:

They must conduct research on problems affecting teachers and children in the schools. They must form research teams to do research in the schools. This will improve teaching and skills, and then the results will improve. They may assist with documentation, policies and writing of reports.

Pursuing a similar view another participant said, “In rural schools I think teachers should have computers and be trained to use them for research. The research can cover issues like discipline, resource mobilization and utilization, and students’ academic performance.” If teachers engage in relevant research they will contribute to knowledge, which is consistent with the view of Natarajan (1993:11) that contribution to the world of knowledge is a key aspect of the quality of education. Peano (2002:8) also supports the notion that research should address the allocation of resources if quality is to be achieved.

- Finally the participants felt that another strategy is to have a sound monitoring mechanism for BSP (Z) activities. One participant pointed out that, “There should also be a very clear system of making sure that the work of BSP (Z) is monitored.” This suggestion is supported by literature by Kanji (1995:461), who argues that monitoring and measurement ensure that the quality thrust is not lost.

5.3.1.2 ZIMSEC

a. Programme worth and expectations

The introduction of ZIMSEC was viewed as a positive move. The unit was described as an important part of the Ministry of Education, Sport and Culture, as one school manager said, “Definitely I think it is very important. ZIMSEC and the ministry have improved the level of education in the country by maintaining the cost per-subject at a reasonable level.” This assertion was, supported by another participant who had this to say, “If ZIMSEC had not been established a lot of people would not be managing to write their “O” level examinations. I think it was a good idea.” A third participant emphasized the same view by pointing out that, “It was a noble idea to localize these examinations, obviously to save money, and to at least ensure that we have more people managing to do the examinations.”

Participants expected ZIMSEC to manage the country’s examinations smoothly and efficiently so that they are reputable internationally, as one of them said, “The management should be very efficient because when you are given a responsibility to manage a local examination you should see that everything is done well.” The expectation coincides with the view held by Natarajan (19993:11) that the system of examinations and certification contributes to the quality of the education system.

b. Programme achievements

The most evident achievement of ZIMSEC was said to be the improvement of access to the “O” level examinations. “They have tried to keep the examination fees affordable so quiet a number of parents can pay for their children to do the examination. To that extent we can say it’s positive...” observed a participant whose view was echoed by another who said, “There are now more students registering for the examinations than before.” These views are, confirmed by Murira (2001:9) when he says the number of “O” level examination centres and candidates rose from 772 and 58 095 in June 2000 to 1 718 and 291 562 in November 2001, respectively. Access to schooling is an important indicator of the internal efficiency of an education system (Moyo & Mubengegwi 1995:62-74). To this end ZIMSEC has made a significant achievement, which the participants acknowledged, as evidenced by the following quotation from a participant, “They are trying by all means to have all pupils registering for ‘O’ level, and that is happening. So ZIMSEC is a good idea.” With more people accessing the examinations the number of passes has also increased over the years and this was viewed as a positive development (Murira 2001:9). Cases where some schools fail to produce even one student with a full certificate are now not common as used to be the case previously.

The examination questions were deemed to be now more relevant to the rural set up in which Rural Day Secondary Schools operate. One school manager said of the examinations:

I think it has had a positive impact. Looking at the standard of setting the questions, I think they have also included questions based on the rural setting. They have in mind that most of our pupils are in rural areas. This is good as children answer questions on familiar topics.

This enables students to perform better as they now deal with issues that they are familiar with. This has the potential to raise the pass rates, which contribute to the improvement of the internal efficiency of the school system (Natarajan 1993:11).

ZIMSEC has also instituted cost saving and made the examinations more affordable than before. “It makes a lot of financial sense and improves access to education especially for

the disadvantaged rural people,” said a school manager. A similar view was echoed by another school manager who remarked, “They have tried to keep the examination fees affordable so that a number of parents can pay for their children to do the examination.” It was pointed out that the examination fees are now charged in local currency, therefore the cost per-student has gone down. This agrees with the announcement by Sibanda (1999:1) that, “The fees to administer the examinations would now be wholly charged in local currency and this makes the examinations affordable even to the economically vulnerable groups in rural areas.” Low cost per-student is in keeping with the suggestion by IIEP (2001:7) that efficiency implies an optimal relationship between inputs and outputs.

ZIMSEC also publishes revision booklets for use by teachers and students, as acknowledged by a participant who said, “ZIMSEC is also producing revision booklets, which assist students to prepare for the examinations. This is good and it helps the students to pass.” These booklets contribute to the learning resources and guide students on how to tackle examination questions, and can thus improve pass rates. Improved pass rates lead to higher internal efficiency of the school system (Natarajan 1993:11).

c. Programme challenges

Participants largely believed that ZIMSEC examinations are inferior to those offered by its predecessor, the Cambridge International Examinations Board (CIEB). The participants also argued that ZIMSEC certificates do not get international recognition. “The pass rates have gone up numerically, but they are not of good quality. The examinations have become easy and are not marked properly. The results may not be recognized internationally,” observed a participant. While the idea to have ZIMSEC was noble, the perception among participants was that the implementation of the programme has resulted in the lowering of standards. The ZIMSEC graduates were described as unemployable, as one of the participants charged, “The results are not good enough as we have a lot of people with those passes who cannot get jobs. It means that those passes are useless. So I don’t think the results have gone up, at all.” If these assertions are taken as

correct, the view of Hoy, *et al* (2000:2) who quotes Deming as saying, “A product or service possesses quality if it helps somebody and enjoys a good and sustainable market,” has been negated by ZIMSEC. If the students pass, but cannot be employed their certificates lack quality.

However, according to ZIMSEC (2003:2), ZIMSEC is affiliated to both the Association of Educational Assessment in Africa (AEAA) and the International Association of Educational Assessment (IAEA), and is monitored by the National Academic Recognition Information Centre (NARIC), so its certificates are recognized internationally. It could be that the participants are not aware of these arrangements. There could be other factors, like the economic downturn that make the graduates fail to get employment.

The participants also blamed ZIMSEC for lack of transparency in the selection of people to set and mark examinations. A participant alleged that, “In most cases those who are experienced are not involved in setting examinations. It is not clear how those who set papers are selected.” Another participant added that, “The criteria are not clear and often lowly qualified and inexperienced people are chosen ahead of better qualified and more experienced ones. There are cases where teachers mark subjects they neither teach, nor were trained for.” Yet another participant supported the view that there is lack of transparency by declaring, “In most cases those who are experienced are not involved in setting examinations. It is not clear how those who set papers are selected. They need to be more transparent.” The use of under qualified and inappropriately qualified teachers to set and mark examinations compromises the quality of education, as Moyo and Mubengegwi (1995:62-74) point out that teacher qualifications are a key determinant of the quality of education.

Of late ZIMSEC has instructed that examination question papers be kept at particular schools before being written, and the rest of the schools collect them on the day of writing, an arrangement deemed to be inconvenient by the participants. One participant said about this arrangement:

The centralizing of papers whereby we go and take papers from one centre causes confusion because the other day there was a situation whereby the papers that were supposed to be written were not available because two packs of the same subject had been dispatched and no one had checked. The examination was delayed and this frustrated the candidates.

A similar concern was raised by a school manager who remarked:

The storage of the papers is also confusing. Papers are kept at one school and each school has to collect its lot on a daily basis. They should give the person who is supposed to go and collect papers money since he/she will be carrying them up and down. Carrying the papers up and down is a risk.

Refuting a suggestion that the arrangement was to control for possible paper leakages at school, another school manager retorted, “I think even ZIMSEC itself can leak the papers. They just have to trust the headmaster... I do not think there is much sense in this idea of us collecting examinations from another centre daily.” This arrangement was said to result in a waste of time and money as school heads travel up and down to collect the papers. At times there is chaos at the collection centres, leading to delays in the start of the examinations, which in turn frustrate students and may affect their performance.

Paper leakages, which were said to be rampant at ZIMSEC, also compromise the quality of the examinations. One participant remarked, “It is possible that some students who get these good passes will have seen leaked papers, so those results may not be genuine.” This fear is, confirmed by Sibanda (2001:5), then Director of ZIMSEC, when he says, “There have also been reported cases of examination leakages.” This shows the system is failing to secure its examinations and certification procedures, which are a key aspect of the quality of education (Natarajan 1993:11).

The examination system is also fraught with repetition of questions and errors that compromise the quality of the examinations. A participant said:

I would like to comment on the standard of papers. You find they have errors here and there. Students and teachers have complained about errors in the results. For example a student writes Commerce, but on the results slip it indicates another subject she or he did not write. Then we doubt if the rest of the results are correct.

Emphasising that examination questions at times have mistakes another participant said, “At times their questions have mistakes that force children to give wrong answers.” The concerns of the participants, that there are errors in the examinations are confirmed by Sibanda (1999:2) when he says, “A more distressing development was the mismatch of “O” level examination papers for November 1999.” Such a trend discredits the examination system, which is a major aspect of the quality of education (Natarajan 1993:11).

ZIMSEC examination markers are poorly paid, and are thus not very motivated to do a good job, as observed by a participant when he said, “From my own observation most markers are leaving. The reason being the money they are paid after the exercise, which is not encouraging. There is need to pay markers well so that they are motivated.” When markers leave marking they break continuity, while the experience they will have gained over the years goes to waste. If the markers’ morale is low, it compromises the quality of education (Natarajan 1993:11).

The processing of examination results takes long as one participant observed, “Results take long to be released and we do not even know when to expect them.” There is no known date by which results will be released to enable students to plan ahead in good time for the future. ZIMSEC does not provide a clear diary of events to its stakeholders so that they can plan to give a good service to the clients.

d. The way forward

- It was argued that staff for setting examinations should be overhauled, as one participant said:

Only highly qualified people should be involved in setting examinations. Not this situation where even people without degrees are used to set the examinations. They are not very different from the pupils for whom they are setting the papers and there is no quality here.

The suggestion was supported by another participant who said, “They must recruit experts in different subject areas.” It is important that only highly and appropriately qualified experts must be involved in the process to ensure that there is quality. Moyo and Mubengegwi (1995:62-74) posit that teacher qualification is a critical component of the quality of education. It was suggested that at least people with a relevant Master’s degree should be in charge of the marking in a particular subject. Staff from universities and other tertiary institutions should be used. One participant had this to say in support for the need to use highly qualified personnel, “They must start by employing the right people with the right qualifications, because the idea is good, but the people working there do not do things properly. The people working there are the problem.” Another participant added, “One should have taught for a number of years before being allowed to be an examiner. He must also have a very high level of education in a particular subject. In my opinion only people with a Master’s degree in a subject must be involved.” The emphasis to have the right people in place is in line with the view of Gatiss (1996:17) that quality depends on people, and not things. Expressing a similar concern one participant said, “I think the quality of the examination has been lowered because in the past they used to have seasoned examiners, people who really cared about quality. Now ordinary teachers without any experience are involved.”

- There is also need to improve transparency in the appointment of people to do examination work. A participant commented as follows about appointment of personnel:

I do not know the criteria they use to select people to set examinations. I want to add to what the last speaker has said about experience and training. I’m saying this because I have realized that when we go for

marking sessions there is a marking scheme that has been prepared by the National Chief Examiner, and yet it has wrong answers. It means some chief examiners are not sure of the subject content, so they may prejudice students.

The need for transparency was echoed by a participant who said, “There is also need for transparency in the selection of markers and setters. It’s not clear how people are brought in. It is possible there is favouritism, corruption and nepotism in the process.” The setters and markers must be distributed equitably among the schools, so that all schools benefit from teacher-exposure to examinations marking, argued the participants.

- It was also emphasized that each school must keep its own examination question papers prior to writing; given that all schools have storage facilities and the school heads are responsible professionals who deserve to be trusted by the examination system. Said a participant, “Schools must keep their own papers, not to have papers kept at one centre and collected on the day of the examinations. This creates problems and risks for the school head. That needs to be corrected.” It was argued that this would save time and money spent on trips to collect the papers from the selected schools daily.
- Participants also suggested that there is need to have a well-publicized diary of events for the year, and one of them said, “Also there is need to have a calendar that shows when certain things will be done.” This would help schools to prepare for the examinations in good time. The parents would also be able to prepare the examination fees for the students in good time and avoid a frustrating last-minute rush and the risk of failing to meet the deadline for registration. Effective communication with the schools also needs to be achieved. Sallis (1996:46) views communication as important in quality management. An important tool of communication could be the examiners’ reports that ZIMSEC ought to send to the schools.

- It is also important to pay examiners adequately so that they commit themselves fully to the job. A participant had this to say on the need to improve payment of markers:

The other reason that may make them relax is that the payment for marking is very little and at times it is not paid on time. For instance last year the markers went on strike for delayed payments. In a situation like that a thorough job cannot be done and the students may be affected. There is therefore need to pay markers well to raise their morale.

The call to raise the morale of the markers is consistent with the suggestion by Natarajan (1993:11) that the morale of the teaching profession is important for the sustenance of the quality of education.

- Finally, even though ZIMSEC has made access to the examinations affordable the participants felt there is need to hike examinations to reasonable levels, as one of them observed:

They have tried to keep the examination fees affordable so quite a number of parents can pay for their children to do the examination. To that extent we can say it's positive, but these low fees have also affected the efficiency of ZIMSEC. The money is not enough to pay markers. There is need to revise the fees upwards.

In support of this strategy other participants said, “Maybe ZIMSEC needs to charge slightly higher fees for the examinations to improve on its efficiency,” and “They should hike examination fees.” Responding to a probe on whether increasing fees would not compromise access to the examination, one participant said:

No! That would actually add value to the examination, as it would take an effort to afford the examination fees. Right now some students do not take the examination seriously because it is too easy to access. If a lot of effort is put to raise money and also improve efficiency they would produce something.

The current fees stand at \$500-00 per subject when it costs \$16000-00 to produce a question paper (Chigwedere 2004:1). There is, thus, no optimal relationship between inputs and outputs and so the examination lacks efficiency (McMahon 1993:22). The examination is being offered far below the cost of producing it. This puts a strain on the government fiscus as it has to heavily subsidise the examinations.

5.3.1.3 The Quality Assurance Division

a. Programme worth and expectations

The participants maintained that if properly run the division can improve the quality of education of Rural Day Secondary Schools, with one participant pointing out that, “I think really if they were taking their job seriously as they are supposed to do, it would improve the quality of education in Rural Day Secondary Schools. It is a good idea for the ministry to have a Quality Assurance Division.” A similar view is also held by both Oakland (1995:13) and Sallis (1996:19), who argue that quality assurance should be built into the production process and focuses on the prevention, rather than the mere detection of faults belatedly.

Participants expected the division to work closely with them, and Education Officers to visit schools regularly to discuss issues at least twice a year, and at most twice a term. This they felt would ensure that faults in their teaching are prevented, and the costs incurred in correcting those faults can be avoided. One participant said, “I expect them to come to school at least every term and help teachers with the difficulties they face.” He was supported by another who remarked, “They should visit schools and make sure teachers are really teaching correctly all the time. They should not wait until the mistakes have occurred and then come to correct these and criticise teachers.” The line of thought presented by this participant equates to the avoidance of internal failure costs seen by Greenwood and Gaunt (1994:82) as activities associated with doing unnecessary work as a result of errors, poor organization and use of wrong materials.

b. Programme achievements

The participants unanimously agreed in all cases that the Quality Assurance Division has not achieved anything tangible in their schools, as the Education Officers were virtually invisible. One participant observed, “Their impact has been nil. For the three years I have been here I have not seen them. So I think they have no impact at all as we have been working normally without them. I do not even remember seeing circulars from them.” A second participant echoed similar sentiments when he said, “They are really failing because we find they cannot even provide syllabi. How do they expect us to teach, using what?” and yet a third added, “They come once in a while, maybe after four years. What kind of standards control is this, because someone would have misfired for a longtime? And then they will come and say, ‘No you should have done this and this.’” The non-visibility of Education Officers in Rural Day Secondary Schools is confirmed by Grauwe (2001:103) who observes that in 1997 the average number of years between visits to rural schools by Education Officers was 4.22 years compared to 1.7 years for peri-urban schools. This trend negates the quality thrust for Rural Day Secondary Schools. The questionable nature of the standards control expressed by the participant who asked, “What kind of standards control is this...?” is consistent with the assertion by Oakland (1995:13) and Sallis (1996:19), who argue that quality assurance should be built into the production process, and focuses on the prevention, rather than the mere detection of faults belatedly. If Education Officers do not visit schools for more than four years, there can be no quality assurance.

c. Programme challenges

The first challenge noted was that Education Officers were not accessible to Rural Day Secondary Schools, as one participant put it, “I have been at this school for the past nine years. Education Officers have been here only twice. I, for one, have only one report. The second time they came I was not around. So their visits have been few and far apart.” Explaining the same scenario another participant commented, “ We are not very sure what they do. They hardly come to schools. I do not remember seeing them here in

the last five years.” These claims are supported by literature from Grauwe (2001:103) that says by 1997 the average number of years between visits to rural schools by education Officers was 4.22 years.

In most cases teachers have gone beyond four years without being visited by Education Officers. This means a lot of errors and problems go unaddressed for a long time and this negatively affects the quality of education. There have been no workshops either, and circulars pertaining to specific subjects hardly get to the schools. Even current syllabi were at times not available in the schools as one participant remarked, “They fail even to send basic things such as syllabi and lists of set-books for both Literature in English and African Languages.” He was supported by another participant who said, “They are really failing because we find they cannot even provide syllabi. How do they expect us to teach, using what?” The failure to send syllabi to schools is a violation of the Clients’ Charter as in the Charter the division undertakes to, “Produce and review syllabi every five years and dispatch syllabi within three months of production,” (Office of the President and Cabinet 1999:4). Maybe one reason for Education Officers failing to be accessible to the Rural Day Secondary Schools is the observation by Grauwe (2001:29) that the distance between regional office and the rural schools has been difficult to bridge.

In the absence of Education Officers the supervision of teachers has been left to school heads and heads of departments, but this has its own problems as a participant observed:

They have left the supervision of teachers to HODs and headmasters. The problem is that the headmaster can assist with general issues since he is not a specialist in all the subjects. Again in these Rural Day Secondary Schools the HODs may not be very experienced. You find some of them have been teaching for only two years and that does not help teachers at all.

It was argued that this has not helped much as both school heads and heads of departments have their own classes to teach, and so may not have adequate time for supervision. School heads also have to do administrative work, and besides they are not specialists in all subjects. Even heads of departments have to supervise the teaching of subjects in which they are not specialists, as subjects are often grouped to form a

department, as one participant pointed out, “For instance Geography and History may be combined to form the department of Humanities, and it is not always the case that the head of department is a specialist in both these subjects.” So there is no expert supervision and this impacts negatively on the quality of education of Rural Day Secondary Schools.

d. The way forward

- There were mixed reactions on the future of Education Officers, with some participants advocating that they should be retained, while others felt they should be done away with. Arguing for the retention of Education Officers one participant said:

I think we need Education Officers because we find that the teachers that I'm supervising are my friends and at times they tend to relax. But if they know that there is somebody above who will come down to check their work then they will work hard. EOs will ensure more seriousness and I think the ministry must employ more EOs and give them the necessary resources to be able to go to schools and supervise teachers.

- A participant who was opposed to the retention of Education Officers countered by saying, “No! I do not think we need EOs at all because we have supervisors already in the schools, and if these supervisors do their work properly schools can run smoothly. To bring these EOs is duplication of duties and a waste of money.” Further arguments were that Education Officers served no purpose as schools have been operating and surviving without their input. One comment from a participant was, “So long as there is a way of sending relevant information to the teachers the schools can survive quite well without Education Officers.”
- Those who argued for the retention of the Education Officers said the officers should be integrated into other structures like BSP (Z) and ZIMSEC. One participant remarked:

I think they should be retained and can coordinate activities of other organizations like ZIMSEC and BSP (Z). Their experience and knowledge can benefit the systems. For instance there are some problems that I have realized. Like in Mathematics there is something that has changed in the syllabus. The only person who can help is the Education Officer and he is the best person to liaise with ZIMSEC. I think they should assist in setting and evaluating examinations.

Other arguments for integrating Education Officers into BSP (Z) were, "...BSP (Z) is sort of an umbrella body. Different Education Officers can contact the schools through it. They can hold subject or general workshops using BSP (Z) structures. This will be a more holistic approach to quality of education," and, "Education Officers can plan and supervise the work of BSP (Z) to ensure there is uniformity. They must lead teachers in doing their activities." That the "experience and knowledge" of Education Officers would benefit the programmes is consistent with the thrust of BSP (Z) to, "...motivate teachers and administrators, develop a culture of effectiveness, effective classroom instruction, and create an enabling environment, among other things," (Ministry of Education, Sport and Culture 1995:2-3).

5.3.1.4 The Clients' Charter

a. Programme worth and expectations

The Clients' Charter was viewed by the participants as a programme that explains the focus on customers by workers in an institution, and a participant said, " I think it is having your relationship with the client clarified. Are you friendly in dealing with clients or not. You also explain how you wish to communicate with your students." Echoing a similar perception of the programme another participant remarked:

The Charter explains what is acceptable and what is unacceptable behaviour from workers in a school. It also stresses that students are our clients and so are the community members. There are also internal customers who are the other workers in an organization. Each one of us must strive to satisfy all these customers.

A third participant had this to say, “I think it also has to do with the ethics of the job.” The perceptions of the participants of the Clients’ Charter are consistent with the assertion by Office of the President and Cabinet (1999:3), which states that, “As a way of continuing to meet the needs of its customers more effectively the Ministry of Education, Sport and Culture introduced a Clients’ Charter.” The Clients’ Charter clarifies the importance of the customer and how the institution should relate to the customer. It also spells out what is acceptable and what is unacceptable behaviour by the members of the institution.

The Clients’ Charter was seen as a tool with great potential to improve the quality of education of Rural Day Secondary Schools if implemented according to plan. One participant commented, “I think that the programme was a good idea, but it was not properly implemented.” The same view was raised by another participant who said, “I think every institution must have a written guide on how to deal with the people who come to it. The document should be displayed like it is done in police stations. It should be available, like in police stations, you will see it.” Because the Clients’ Charter clarifies roles and expectations, participants said it improves working relationships and accountability. Thus, more time is spent on serving the customer, rather than resolving work related conflict. These ideas of the participants are in line with the views of Bell, *et al* (1994:3) that customers are key in quality. Goddard and Leask (1992:20) maintain a similar view when they say, “Quality is simply meeting the requirements of the customer.” If the Clients’ Charter can help students and parents get what they need from the school, it is a useful quality management tool.

Participants said the Clients’ Charter can help in monitoring performance of teachers, with one participant pointing out, “...it is a good tool for quality improvement. Some of us do not perform well to our clients. But with the Charter the headmaster, or the senior teacher can approach me to work properly. Even my colleagues can correct me if I am not working well.” Regularly, they can compare their actual performance to the standards set in the Clients’ Charter, and then take corrective action. This would ensure

that there is continuous improvement in their performance and ultimately in the quality of education of the Rural Day Secondary Schools.

b. Programme achievements

According to the participants, in spite of being a very noble idea for improving the quality of education of Rural Day Secondary Schools, the Clients' Charter has to date not had any achievements except the training of a very few people. One participant observed:

Nothing has been achieved. The whole point was lost initially because people who were supposed to service others had little knowledge. During the workshop there were questions that were asked and the gentlemen who presented the papers had no definite answers. They kept on referring to the Head Office and people were not convinced.

Some teachers have had access to the documentation relating to the Clients' Charter, and the training was done in a one-off workshop, without any follow up afterwards. A participant pointed out:

I think, to say the truth, there are very few teachers who know about the Clients' Charter. Very few people were actually selected and talked to by the team that was trying to introduce us to the Clients' Charter. I think as from that day everything was left to individual schools, and that was the end of it.

c. Programme challenges

Not much has been done in terms of training teachers on the Clients' Charter and giving it the necessary publicity, as evidenced by the following comments from the participants, "The problem with the Clients' Charter is that most of us are not familiar with it," and, "I have no idea, at all," and "I once saw a booklet with that heading but I am not sure what exactly it is." In one school none of the school managers who participated in the focus group had received training on the programme. "I do not remember hearing about it, ever," retorted one school manager.

Even those who attended the one workshop were not convinced that a thorough job had been done as they still had a lot of questions unanswered. They said during the training it was not clear how the programme was going to be operationalised, and the trainers themselves were not ready as one participant observed, “Even the people who came from the ministry were not very clear about it. I think people still need more training by people who are more competent.” A similar view was raised in a separate focus group by a participant who claimed:

To be honest we know very little about the Clients’ Charter. What happened once in our school was that the team, which was inducting us on the Clients Charter, passed through and gave us a few guidelines on what we are supposed to do. But we never had any follow up.

Failure to implement the Clients’ Charter effectively compromises the quality of education since quality management includes the product/service, the customer, customer satisfaction, deficiency and customer dissatisfaction (Steyn 2001:18). It is unlikely that without understanding the Clients’ Charter, the teachers will handle customers in a manner that satisfies them, and thus promotes quality of education.

d. The way forward

- It was suggested that the training of people on the Clients’ Charter should be revived and taken more seriously. “There is need to have workshops to train all concerned and not just a few individuals. If many people are trained they will understand the programme and follow it,” retorted one participant. Presenting a similar suggestion another school manager said:

Let us get the right kind of people who have got knowledge and who can answer people directly and reach out to the feelings and needs of the people to make them understand. This will ensure a firm foundation for the programme to take off seriously.

It was argued that the training ought to involve school heads, managers, teachers, parents and the students. This suggestion is consistent with the notion by (Huxtable 1995:53) that a quality initiative must involve both external and internal customers and suppliers.

- Once people have been trained a Clients' Charter for each institution must be drawn up in consultation with all the stakeholders, and be displayed for all to see.

A participant commented as follows:

Even if just a few people are selected for training when they come back they should impart knowledge that they would have got to the other stakeholders, and after that maybe we utilize the knowledge, which we will have gained to make sure that it runs. It is important that the Charter is displayed for all to see, like I have seen in police camps. That way everybody will always be reminded to act according to it. Even the clients will easily know what and what not to expect from the school. That way there will be very few misunderstandings.

The need to have the Clients' Charter displayed was emphasized by other participants. One said, "It must be displayed in various places where a lot of people will see it. It helps to keep everybody alert..." and another emphasised, "I think every institution must have a written guide on how to deal with the people who come to it. The document should be displayed like it is done in police stations."

- Once the Clients' Charter has been launched there is need to have a well-understood and documented process to evaluate its implementation. One participant said, "I think for the Clients' Charter to succeed there should be people who will, actually, supervise its implementation. Without supervision it might be difficult to achieve much." Evaluation can be based on Crosby's Zero Defects Approach to quality in which numerical data and qualitative customer feedback are used (Morgan & Murgatroyd 1994:193-194). But other forms of information can be used, so that there is a continuous thrust to improve service to customers (Deming 1986:31).

5.3.1.5 SDCs

a. Programme worth and expectations

School Development Committees were viewed as units that should focus primarily on the provision of infrastructure and learning materials for Rural Day Secondary Schools, as well as mobilization of finance for the schools. One participant pointed out that:

They should develop structures and buy equipment for the school. They should make sure there is enough furniture for our kids, and enough classrooms too. If they are not enough they can put some effort, for example they can organize and look for funds to build more classrooms. They ought to mobilise parents to erect classrooms, laboratories, libraries and teachers' accommodation.

Another participant supported this perception by saying, “To start with they assist in school administration. I think they are involved in decision-making in the schools, especially on schools fees. They are the ones who decide the amount of school fees students should pay,” while another observed, “ They should also be involved in maintenance work in the school.” These expectations tally with the directives of SI 87 (1992:613), which formalized the establishment of SDCs. That the quality of education is also related to financial management and teacher housing, is also alluded to by Bowora (2002:1-2).

SDCs are expected to assist with the maintenance of school discipline in line with SI 87 (1992:613), which says SDCs have as one of their objects, to advance the moral and cultural welfare of students in their schools. Participants also alluded to this expectation, with one of them saying, “Maybe they can also be asked to help maintain school discipline by talking to parents and children.” They should also be a communication channel between the school and the community. Discipline is necessary to ensure students focus on their learning without interruption, and disciplined students are likely to emerge with knowledge, skills and values that are relevant to human and environmental conditions and needs, which is a critical indicator of the quality of education (Grisay & Mahlck 1991:3).

As the representatives of the community in the running of the schools the SDCs should have the right to question school performance, argued some of the participants. A similar view is held by Kanji (1995:432) when he says in the United States parents ask of education, “What exactly are we paying for?” The SDCs thus act as watchdogs to ensure parents get value for money from the schools, and to this end one participant said, “SDCs are the eyes of the community, especially where funds are used.”

The SDCs were thus generally viewed as a good idea that allows parents to have a say in the education of their children. They help to decentralize school decision making down to the customers of the service. One participant said, “I believe they are actually acting as a bridge between the community and the schools. They are supposed to pass teachers’ views to the community at large and make it realize that certain things are really important.”

b. Programme achievements

There was general consensus that SDCs have provided reasonably sufficient infrastructure especially in the form of classrooms. One participant pointed out, “They have put up classrooms for all the students and we do not have classes under trees like used to be the case. Even basic laboratories have been built in some cases, so it’s okay.” Another participant raised similar observations when he said, “They are also assisting in developing infrastructure for the schools. They have finished classrooms, laboratories and so on. For instance we have a library here that was built by the community working with the SDC.” On the same issue a third participant said, “The SDCs have managed to put up classrooms and teachers’ houses that have contributed to the quality education in Rural Day Secondary Schools. In some cases they have built libraries and laboratories.”

Still explaining the achievements of SDCs another participant said:

Through the work of the SDC the school now has electricity and in science we can now conduct our experiments properly. This is good for the pupils and the teachers. It improves the quality of education and I think more pupils will start passing science. Revision is now, done by students, in the evening, so they have more time to study.

Participants also pointed out that SDCs have managed to buy teaching equipment and learning materials for the schools. The supply of furniture has also improved, so the conditions under which students in Rural Day Secondary Schools learn have improved through the efforts of SDCs, as a participant remarked, “The SDCs have also bought learning materials for the schools.” It was also noted that SDCs, “...also work with headmasters and parents to improve the discipline of the children. This helps to ensure that the school produces well-behaved citizens who are not a disgrace to the community.” This is in line with the provisions of SI 87 (1992:613), which states that one of the objects of SDCs is, “...to advance the moral and cultural welfare of students in their schools.”

The situation described by the participants, in terms of infrastructure and school materials, is generally different from the one reported by Dorsey, *et al* (1991:41-46) that in Rural Day Secondary Schools “...students arrived ahead of classrooms and other materials.” It was thus concluded that indeed SDCs have contributed positively to the quality of education of Rural Day Secondary Schools.

c. Programme challenges

The level of illiteracy among SDC members was deemed to be very high, and it curtailed ability to understand government policy on education and make informed decisions. As a result they tended to, “...at times, oppose good ideas or just endorse things they did not understand.” This was supported by a participant who observed that, “The main problem is that a number of these people that they elect into these committees are not educated. You find that they do not improve much in the schools because of their limited knowledge of education.” These views were, reiterated by another participant who remarked:

There are cases where they oppose good ideas from staff because of their lack of understanding. At times they want to take over the administration of the school and try to supervise teachers. But they have never been teachers, so this frustrates teachers and destroys the quality of education in rural schools.

The frustration of teachers may compromise the quality of education of Rural Day Secondary Schools. Natrajan (1993:11) argues that the morale of the teaching profession is important for the pursuance of quality education.

d. The way forward

- The participants argued, that SDCs, need to be trained to understand their roles. One participant said, “SDCs must be trained to understand that teachers and headmasters are there to assist their communities so it is important for them to cooperate and live in harmony with each other...documents that describe the role of SDCs must be sent to all schools.” This suggestion was echoed by another participant who said:

I think, maybe the Chairpersons must be trained on how to make sound decisions that support education, because removing them may alienate the community from the school. Basic management courses on school development may be useful. Yes, I agree that some of them endorse things they do not understand so they must be helped to understand things better.

Another participant argued that the training must also involve school heads and teachers, as they also at times contributed to the problems. He said:

It is possible that at times the problem is the headmaster and the teachers so the training given to SDCs must also cover headmasters and teachers. Teachers must not look down upon SDCs just because they are not and it is good to listen to them.

The training would help SDCs and school heads and teachers to conceptualise better their tasks and this is, supported by Steyn (1999:23) and Sallis (1996:105), who argue that to conceptualise what to do is the first step towards quality.

- There is also a need for training in elementary financial management as SDCs are mandated to manage school finances (SI 87 1992:613). One participant said, “Basic financial management courses may be useful.” This would help them to appreciate the need to raise fees to reasonable levels.
- There is a need to monitor and evaluate the work of SDCs and give them continuous training, as posited by a participant who said, “Besides that, their activities must be monitored and they be given continuous training. As times move they will meet new problems and so it is necessary to keep training them.” Another participant added:

Regular workshops can be conducted... to evaluate their work and deal with problems that might arise. Committees may also be taken to observe the work of other committees in more successful schools. This will motivate them and teach them how to do things right.

This would be in keeping with Deming’s (1986:24-86) view of continuous improvement in quality management. The importance of monitoring in quality management is also supported by Morgan and Murgatroyd (1994:193-194).

- The participants also said it is necessary for government to set a minimum educational qualification for people to be elected to the SDCs. One argued:

I think government can assist by setting minimum educational qualifications for people to be elected into these committees. They should look for educated people who will understand the need to raise fees and motivate parents to take an interest in the school. They have to look for people who will see the need to develop society.

This view was, supported by another participant who said, “I think first of all we need former teachers, that is, people with education and experience, and a high level of understanding skills to form these committees.” The argument that SDCs must consist of people with high conceptual skills is in line with the views of Steyn (1999:23) and

Sallis (1996:105), who posit that to conceptualise what to do is the first step towards quality.

5.3.2 Strategies for improving the quality of education of Rural Day Secondary Schools

Research question 4 sought to determine what strategies school heads thought could be used to improve the quality of education of Rural Day Secondary Schools. From the personal interviews with five school heads, five factors, that impact positively, and thirteen factors that impact negatively, on the quality of education of Rural Day Secondary Schools emerged. The school heads also explained how the factors that impact positively on the quality of education could still be improved. One head pointing out, “There are a number of both positive and negative factors. We can still improve on the positive, but there is definitely need to address the negative aspects if the quality of education is to improve.” This is in line with the view of Deming (1986: 24-86) who says total quality management implies continuous improvement. They also explained how the negative factors could be addressed so that the quality of education is improved. The factors and strategies for improving the quality of education of Rural Day Secondary Schools, suggested by the school heads are discussed below.

5.3.2.1 Positive factors

a. BSP (Z)

School heads viewed the programme as a worthwhile intervention that has contributed towards the improvement of the quality of education in Rural Day Secondary Schools. One school head said of BSP (Z), “...its aims and objectives, if considered seriously can reduce the problems faced by these rural schools.” The same view was echoed by another school head who said, “Effective implementation of BSP (Z) can promote the quality of education. It addresses educational challenges by staff developing teachers and school heads, and tries to involve as many stakeholders as possible.” Literature by Steyn

(1999:21) supports this approach as she argues that in the pursuit of quality, leadership should strive for the involvement of all stakeholders in pursuing a vision that has been set by the leadership.

Summarising the impact of BSP (Z) another school head said, “Recently there have been great efforts in bringing together teachers of similar subjects and in so doing quality is improved.” School heads have also worked together under the programme and this has enhanced their professional development and management skills. This is in line with the assertion by Creech (1994:363) that leadership is learnt from others.

There is a need, however, to still improve the programme capacity in terms of reaching out to all schools, especially the very remote ones. Heads argued that the programme’s resources were more accessible to those schools that are close to district and regional centers, an observation also made by managers and senior teachers during the focus groups (see section 5.3.1.1 (c)). A school head noted that, “Some of the schools fail to attend cluster meetings as the venues are very far from the schools. As a result these schools miss out and their input is not captured.” The heads argued that more resource centres should be opened and properly equipped at cluster level so that all the schools benefit from BSP (Z), a view that was also raised by school managers and senior teachers in the focus groups (see section 5.3.1.1 (c)). Pursuing this notion one school head said:

It started well as a very good idea, but more must be done at the cluster level so that the schools can benefit directly. At the moment a lot of effort is on the district and provincial level but these centres are far away from most schools, so are hard to access. At cluster level there are no resources at all.

A similar comment was, “I think it should be restructured by who ever started it. Centres should be close to schools.”

The heads noted that BSP (Z) tended to group together primary and secondary schools, yet there are different problems affecting the two levels of schooling. Arguing for the streamlining of primary school and secondary school activities, a school head said, “The

programme also treats primary schools and secondary schools as if they are the same. This is wrong, they have different needs and need completely different strategies.” He was supported by another who said, “...and primary and secondary schools must have distinct programmes.” This would help to improve the programme’s focus on customers, as there are different customers for primary schools and secondary schools. Focusing on the needs of specific customers is critical for quality management (Bell *et al* 1994:3; Huxtable 1995:53)

Government and the corporate world should combine efforts to fund BSP (Z) substantially, rather than leave the programme to rely on school levies, which do not yield enough money to sustain critical activities as one school head pointed out, “I think the ministry should also chip in and assist BSP (Z) financially, instead of expecting only schools to contribute monies. The corporate world should also be involved in raising money.” The need to address the funding base for BSP (Z), was also alluded to by school managers and senior teachers in the focus groups (see section 5.3.1.1(c)).

b. ZIMSEC

ZIMSEC was, perceived by school heads, to be an intervention that has helped to improve the relevance of the content of the examination questions. The syllabi and examination questions are now relevant to the circumstances of the students and this helps the students to perform better in the examinations than used to be the case during the Cambridge International Examinations era. “It has brought in a Zimbabwean out look into the examinations, and the questions are now more relevant to the children,” said one school head. In support of the same view another head said, “ I think it has been positive in the sense that the syllabus development by ZIMSEC is now relevant to the situation of children in this country. Every child now has a better opportunity to write an examination that is related to his environment.” Relevance as an attribute of the quality of education is also alluded to by Liston (1999:4).

Because the examinations are now more relevant, the school heads said pass rates have improved, as one pointed out:

This helps to improve the quality of education in Rural Day Secondary Schools as evidenced by pass rates that have improved significantly. You hardly now hear of a school that fails to produce even a single pass at “O” level as used to be the case some years back.

Improved pass rates enhance the internal efficiency of the school system (Moyo & Mubengegwi 1995:62-74).

ZIMSEC charges fees in local currency so its fees are affordable even to the poor so access to “O” level examinations has improved significantly according to the heads, as evidenced by this quotation from a school head, “Besides more children are now able to write the examinations because the fees are affordable and are charged in local currency, so many parents can afford to pay for their children.” School managers and some senior teachers also raised similar sentiments (section 5.3.1.2 (a)). This is also supported by Murira (2001:9) who points out that the number of candidates for the “O” level examinations was 58 095 in June 2000, and grew to 291 069 in November 2001. This represents a growth rate of 401% in less than two years. This is a major shift from what prevailed in the pre-independence era, where only 2% of students completing primary education finally accessed the “O” level examinations (Zvogbo 1986:26).

However, there are still reported cases of students who drop out of school due to inability to pay examination fees, as a school head observed, “The main problem is fees. When the parent cannot raise the fees then the child drops out of school, and cannot write the examinations.” Grauwe (2001:28) concurs that failure to pay both school and examination fees is a major cause of school dropouts. Failure to pay fees is actually the biggest driver of school dropouts in Rural Day Secondary Schools (see Table 5.11 and Figure 5.5). The high incidence of dropouts constitutes a waste of resources, and lowers the internal efficiency of Rural Day Secondary Schools (Moyo & Mubengegwi 1995:62-74).

ZIMSEC still faces problems of errors in examination questions, errors in the publication of results, and at times a leak of examination question papers. A school head made this observation about errors in ZIMSEC examinations:

I think another problem again is the issue of ZIMSEC. There are a lot of problems with ZIMSEC. For instance some students get results for subjects they never sat examinations in. There are cases where wrong results have been sent, and that does not motivate anybody. I think at the end of the day confidence in that examination is lost, and that is not good for quality and reputation of the education system.

The school managers and senior teachers raised the same observations, which tend to impact negatively on the quality of education (section 5.3.1.2 (c)). The school heads advocated a thorough supervision of the process of setting, printing, and packaging of examination papers to avoid both errors and leakages. ZIMSEC also needs to manage its information base efficiently to avoid errors during the publication of results so that the results retain credibility, so argued the school heads.

Given the low pass rates, which are confirmed in Tables 5.14 (a) and 5.14 (b), the school heads said one strategy ZIMSEC could use was to restructure the curriculum and allow those students who do not have the academic potential to pass the “O” level examinations to pursue practical subjects that would develop enough skills to enable them to engage in life sustaining activities even without entering formal employment which requires an “O” level certificate. A school head had this to say about the curriculum:

I think the solution lies in the curriculum. We need a joint curriculum to cater for students who can handle the academic type of examination that ZIMSEC is offering. We also need another system like we used to have in the F2 system, which catered for students with a vocational orientation, and helped them get useful skills. We can have an academic curriculum running parallel to a vocational curriculum in a school and different examinations set for those pupils.

These sentiments are consistent with findings by Zvogbo (1986:64) and Gatawa (1998:14) that the curriculum fails to cater for students of different academic potential,

and that government seemed to have fallen for the fallacy that academic education is the solution to problems of under development. Introducing a vocationalised curriculum would reduce failure rates and ensure that students receive education that helps them and is thus qualitative (Hoy, *et al* 2000:2).

c. Teacher competency

According to the school heads the quality of education in Rural Day Secondary Schools is enhanced by the fact that teachers are now better qualified and able to teach effectively. Most teachers now have degrees, or are studying towards attaining degrees. Others hold Master's degrees. A school head commented as follows:

I think the teachers are properly qualified and are able to teach effectively. Teachers are being staff developed through such institutions as the Zimbabwe Open University. There is need however to focus on teaching subjects, not just to focus on management courses like is the case now. Staff development has enhanced the confidence of teachers across the board. Even those teachers without degrees have at least diplomas in education.

Untrained teachers are only used as relief staff on short-term basis, except in practical subjects where there is still some shortage of qualified teachers. This is an improvement on the scenario described by Nyagura (1991:45) when he points out that teachers in Rural Day Secondary Schools were inexperienced and held minimal, or at times not even minimal academic and professional qualifications. In fact, Chifunyise (1998:11) says by 1998 untrained teachers in secondary schools constituted only 10%. The availability of qualified teachers enhances the quality of education of Rural Day Secondary Schools in line with the assertion by Gatiss (1996:17) that quality is about people, rather than things. This is also supported by literature by Moyo and Mubengegwi (1995:62-74) who say teacher qualifications are a key indicator of the quality of education.

The school heads suggested that, to build on this strength, there is a need to train enough teachers for practical and specialist subjects, as well. One school head said, "In some

cases we do not have teachers for specialized subjects like science and mathematics.”

Another added:

Teacher qualifications present problems because there are some cases where we do not have specialist teachers and we have to rely on untrained teachers. This is common in subjects like fashion & fabrics, building studies, physical science and mathematics.

The strengthening of the teaching of practical subjects would help students to engage in self-employment after school using the acquired skills, even if they do not pass the written examinations. The school heads also called for the improvement of the living conditions of teachers in Rural Day Secondary Schools to reduce staff turnover, which breaks continuity in the teaching/learning process, and would improve the morale of the teachers. The morale of the teaching profession is vital for the sustenance of the quality of education (Natarajan 1993:11).

d. School Development Committees

The fourth factor that was deemed by the school heads to contribute positively to the quality of education of Rural Day Secondary Schools is the installation of SDCs. Referring to the involvement of SDCs in school projects one school head said:

I think it is assisting in so far as the mobilization of resources to assist in teaching and learning is concerned. The involvement of parents helps to improve the management of rural schools. SDCs organize parents to support school programmes, such as fund raising and provision of educational materials. They help in addressing problems of students' attendance to classes. They help to improve the attitude of the community and students towards the school. Attitude is very important for performance and for quality and their involvement is creating a positive attitude about the schools.

Acknowledging the work done by SDCs in Rural Day Secondary Schools another school head added:

If you look at the history of the development of Rural Day Secondary Schools there was a time when teaching and learning was taking place under trees, and later on we had situations where there were just two classrooms for eight classes. Pupils were sharing limited infrastructure, but now I think generally for the ordinary classes there is adequate teaching space, which is standard.

Among other things, the SDCs have constructed infrastructure, procured learning materials and allowed for parental involvement in the education system, which promotes participation and collaboration. The provision of infrastructure in the form of classrooms and teachers' houses enhances the quality of education (Moyo & Mubengegwi 1995:62-74).

Dorsey, *et al* (1991:23) and Gatawa (1998:19) lament the shortage of infrastructure in Rural Day Secondary Schools. They point out that enrolment grew so fast that students arrived ahead of the classrooms and that the typical Rural Day Secondary School is unable to accommodate its students without double sessioning. However, the SDCs have managed to address this situation as most Rural Day Secondary Schools now have reasonable classrooms for their students, as evidenced by the quotation above.

However, the SDCs still need to mobilize more resources to finish the construction of specialist rooms like laboratories and libraries. A school head commented as follows:

The building of libraries in Rural Day Secondary Schools should be undertaken so that pupils get more reference books and more reading materials. I also feel that physical structures like science laboratories are vital so that pupils actually do experiments in a proper scientific manner that can improve their science skills.

The heads suggested that instead of SDCs building libraries in their individual schools, it would be better to combine resources and build bigger and better equipped libraries at the BSP (Z) cluster resource centres. Trying to have a library per school was deemed expensive and beyond the reach of the average Rural Day Secondary School.

School heads also called for continuous training of SDC members to understand their roles, as well as government policy. One said, "SDCs must be trained to understand that

teachers and headmasters are there to guide development in schools as partners. They need to be well educated on education policy and their mandate.” It was felt this would increase the SDCs’ capacity to implement more projects that would enhance the quality of education of Rural Day Secondary Schools. The need to train SDC members was also raised by school managers and some senior teachers during the focus groups (section 5.3.1.5 (d)).

e. Leadership capacity of school heads

Another factor deemed to enhance the quality of education of Rural Day Secondary Schools was the leadership capacity of school heads. This is supported by the following comment from a school head, “I would want to think that there are really good schools heads. They try to give direction to the schools, and most of them are highly qualified, with diplomas and degrees.” The heads felt that people heading Rural Day Secondary Schools had the capacity to give direction to the schools as they were committed and well qualified. Actually all the heads interviewed held at least a degree in Educational Administration, Planning and Policy Studies, which is a great improvement from the observation made by Nyagura (1991:45) that heads of Rural Day Secondary Schools were lowly qualified. This promotes the quality of education of Rural Day Secondary Schools, as quality requires outstanding leadership (Barry 1991:8). The high qualifications are likely to help school heads to provide outstanding leadership in the schools.

5.3.2.2 Negative factors

a. Economic status of parents

The economic status of parents was seen to impact negatively on the quality of education of Rural Day Secondary Schools as pointed out by a school head who said, “To start with, these Rural Day Secondary Schools are low class schools and they are in the centre of poverty...parents are poor therefore they cannot pay fees which can promote quality of

education.” The communities are peasant and poor and therefore unable to support the schools financially. Their cash inflows are seasonal, as they rely on selling crops or livestock, so money is not always available to sustain school demands. For most, such basic school requirements as uniforms and stationary are out of reach. This negatively affects the performance of students, some of whom may ultimately drop out of school, thus compromising the internal efficiency of the schools. Mugabe (1983:29) asserted that it was only fair, that rural communities, who got their pay once a year after harvest should have their children educated at easily accessible and affordable schools, but it appears in some cases the communities are too poor even to afford this cheap type of school. This is also supported by the number of dropouts attributed to failure to pay school fees (see Table 5.11). This view is alluded to by Bray, *et al* (1986:61) and Nziramasanga (1999:303) when they argue that the chief reason why dropout rates are relatively high among lower income groups is that pupils cannot afford to remain in school as they cannot raise school fees.

The school heads argued that an effective strategy to deal with this problem would be for government to increase its subsidy to Rural Day Secondary Schools by increasing tuition grants to reasonable levels. In support of this position one school head had this to say:

There is need to fund these schools heavily. I think government must actually stop subsidizing the more established schools and channel more money to rural schools. This will improve the chances of these children getting a better education. For instance during drought periods a lot of children drop out of school so they need government support.

They noted that the prevailing tuition grants offered to Rural Day Secondary Schools are not enough to sustain the needs of the schools. One school head pointed out that:

The other area when we look at funding is the area of per capita-grants. These have not been reviewed for a long time. Currently they stand at \$500 per child per year. The amount cannot buy even a pen, so that is not enough. I think the government has to do more in terms of funding education.

SDCs must be trained in designing income generation projects so that they boost their financial bases and also assist some well-performing, but needy students from their schools. It was felt this could augment government financial support and help to improve the provision of resources in the schools.

b. Dropouts

Dropouts were perceived to affect the internal efficiency of Rural Day Secondary Schools negatively as they amounted to a waste of resources and defeated the thrust to make secondary education accessible to rural communities. A school head said of the problem of dropouts, “It is really a big problem particularly in rural area schools. We realize that for example in Form 1 we will be having say 100 pupils but when they reach Form 3 or 4 they may only be 50, or even less.” The problem of school dropouts was said to be very serious as another school head pointed out that in the term in which the study was conducted as many as 23 students in a school with an opening enrolment of 313 had dropped out. These estimates are not very much far away from the average survival rate from Form 1 to Form 4 (Tables 5.5 and 5.6).

The causes cited for dropouts were failure to pay fees, schoolgirl pregnancy, long distances between home and school, and counter-attractions of gold panning and search for employment in South Africa and Botswana. One of the school heads said:

The dropout problem is caused by non-availability of school fees. Some pupils drop out of school because there is no one who can pay for them, some are orphans, some have single parents and some come from child-headed homes due to the effect of the HIV and AIDS pandemic. At times girls drop out due to pregnancies. But we do also get pupils who just disappear from school without any explanation.

The views of the school heads concur with findings by IIEP (2001:216) that dropouts, may be caused by examination and school fees, which parents cannot afford. Quantitative data in Table 5.11 also confirms this trend. Tables 5.5 to 5.10 and Table 5.13 actually suggest that the actual dropout rate is much higher than the figures that are officially

recorded. The impact of long distances on school dropouts is also in line with the views of Gatawa (1998:21) and Dorsey, *et al* (1991:23) who postulate that the long distances to school resulted in illegal boarding facilities which harboured students who appeared in school statistics, but were in fact de-facto dropouts harbouring in the proximity of the school until they were let loose on society. Schoolgirl pregnancy as a cause of school dropouts is also evident from Table 5.11.

School heads suggested that government aid to these schools be increased to assist all the deserving students who cannot afford to pay school and examination fees. Referring to tuition grants offered to students by government, one of the school heads said, “Currently they stand at \$500 per child per year. The amount cannot buy even a pen, so that is not enough. I think the government has to do more in terms of funding education.”

To deal with the problem of long distances it was suggested that formal low-cost boarding facilities be set up in Rural Day Secondary Schools to accommodate students whose homes are far from school. Remarked one school head, “We also talked about distances that children travel to school. Some funding has to be generated...so that low-cost boarding facilities are provided especially for girls so that they are not exposed to these problems of HIV and AIDS.”

There is also need to intensify the education of the girl students on the problems associated with early and unplanned pregnancies. Arguing for the need to educate girls on good behaviour a school head said, “Possibly by bringing in people from the health sector who will educate these students who are having early pregnancies on good behaviour.” Senior teachers and SDCs can also talk to these students so that they can postpone issues of sexual activity while at school. The schools also need to work out mechanisms of rehabilitating back into school those students who dropout for various reasons, without causing them undue discomfort, but also without creating a chaotic situation where students move in and out of school willy-nilly.

c. Pass rates

All the school heads noted that pass rates at “O” level in Rural Day Secondary Schools were very low for both boys and girls, and one said, “At this school possibly an annual average of about five students out of sixty manage to pass at least five subjects.” Yet another one said of the pass rates:

So far they are poor. I do not blame the students, I do not blame the teachers, but I blame lack of resources. We do not have the resources, so not many students can pass the examinations. Last year for instance it was 3%. At times it ranges between 6 and 8%. The highest I remember for this school was 12%.

The range of 6% and 8% pass rates is confirmed in Table 14 (a) and Table 14 (b). According to IIEP (2001:217) the average national “O” level pass rate between 1992 and 1996 was 23%. Maramba (2001:9) states that “O” level pass rates for 1998; 1999 and 2000 were 15.7%; 13.9% and 14%, respectively. Therefore pass rates in Rural Day Secondary Schools are lower than the average national pass rates, implying that students from Rural Day Secondary Schools have limited opportunities of entering higher education, or entering the job market as a full “O” level certificate is a pre-requisite for both.

The reasons forwarded for low pass rates were varied. One reason given by a school head was that, “... teachers are no longer interested in their job. They do not have the welfare of the children they teach at heart. Teachers’ attitudes must change.” If teachers are not interested in their work, they will not be able to satisfy the needs of the students, therefore the quality of education will be compromised. Huxtable (1995:9) confirms quality is the satisfaction of agreed customer needs. The same school head continued:

Secondly, the resources such as textbooks are scarce and the situation has been getting worse each year. Students share one book amongst ten or so, and this contributes to poor results. Thirdly, because in the last two years there was drought and pupils were coming to school hungry and we had cases of pupils fainting, and that makes the child lose concentration.

Another cause of poor pass rates was proffered by a school head who said, “ The other cause of poor results is that we take all students, into Form 1, including those who will have completely failed their primary school examinations.” The calibre of students in Rural Day Secondary Schools was said to be academically inferior to students in other types of schools as Rural Day Secondary Schools enroll even students who would have failed the Grade 7 examinations. The resources are limited and teacher morale is low. Distances travelled by students from home to school and back also militate against their academic achievement. One school head observed, “Distance between the children’s homes and the school also affects the performance of the children. For example in this school we have children coming from as far as fifteen kilometers from school. They get to school very tired and cannot concentrate.”

Among the strategies proffered by the school heads was the need to vocationalise the curriculum. “The ministry has to consider a vocational curriculum for these students so that even if they do not pass they can acquire practical skills that will help them to live on their own without necessarily going for formal employment,” suggested one school head. The curriculum was viewed as being too academic and not quite relevant to the needs of the rural people. The focus ought to be on practical skills, which would help students even if they fail the written examinations. After school the students require to be able to engage in activities that will help them sustain their lives. Equipping them with practical skills would be ensuring quality in their education as Goddard and Leask (1992:20) say quality is simply meeting the requirements of the customer.

The heads also felt that the establishment of low-cost boarding facilities could help to improve pass rates. One head argued, “I think if those pupils who live very far are given low-cost boarding facilities they may improve their performance.” This would enable the students more time to study and save them from the effect of traveling long distances to and from school.

Students should also be availed resources to revise for examinations to improve their chances of passing as observed by a school head who said, “ZIMSEC can come in by

providing more revision booklets that are current, rather than using the outdated ones.” There is also need to build the resource base at BSP (Z) cluster centres so that students can access sufficient reading materials as they prepare for the examinations.

d. Lack of resources

Rural Day Secondary Schools experience a serious shortage of teaching resources. Commenting on the shortage of textbooks in his school, one school head said, “The sharing ratio is very high. In some cases even the teacher does not have the basic textbook. On average where the textbooks are available, across the board the textbook pupil ratio is almost one book to six pupils.” A similar sentiment was articulated by another school head, who said, “The other thing is the adequacy of resources like textbooks. The only person who has a textbook is the teacher. Students do not even have textbooks to share among themselves.” A third school head also shared the same sentiment when he said, “The other thing is that there should be enough textbooks to allow the children to read at school and at home.”

Other equipment is also scarce in Rural Day Secondary Schools, as one head said, “The other thing is the material resources, which also contribute to the quality of education. For instance, you find that in most rural schools pupils sit on the floor, or on broken benches, or even on bricks.” In the early 1990’s critical facilities such as libraries and laboratories were scarce in Rural Day Secondary Schools (Nyagura 1991:45-46), and the situation has not changed significantly for the better, more than ten years later. This confirms the belief by Natarajan (1993:12) that, “Underdeveloped countries provide less educational opportunities to rural children.” School heads recommended that the construction of these facilities be made a government responsibility and priority.

Teacher supply has improved in terms of qualifications, but heads felt that teachers are demotivated to work in rural areas due to poor living conditions and unattractive reward systems. One head arguing that, “...and even the teachers that we have are not motivated because of poor facilities.” There is therefore need to improve the living conditions of

rural teachers and give extra incentives that will make the teachers to be motivated to teach in rural schools. This would reduce staff turnover in Rural Day Secondary Schools. Teacher morale is a necessary condition for quality of education (Natarajan 1993:11).

e. Repetition

Rural Day Secondary Schools experience a high level of students repeating classes. The causes for repeating are failure to pay fees, dropouts re-entering the school system, and repeating after failing the “O” level examinations. It was pointed out by a school head that, “Especially with Form 3, the parent would say I’m not able to raise examination fees for the pupil then, the pupil repeats Form 3 instead of proceeding to Form 4. We also have children who fail Form 4 and then come back to repeat the following year.” Repetition rates were higher at Form 3 and Form 4, a trend that is confirmed by the quantitative findings (see Table 5.12; Figure 5.6 and Figure 5.7). Repetition constitutes a waste of resources as it amounts to doing the same job more than once. When students complete secondary education in more time than the stipulated four years, the wastage ratio goes up, and this is an indicator of low internal efficiency (IIEP 1995:69).

According to the school heads there is a need for the government to increase funding to Rural Day Secondary Schools to help pay fees for needy students so that they do not keep on moving in and out of school as repeaters. Some students need to be counselled so that they concentrate on their studies and avoid dropping out unnecessarily, and avoid failing the examinations due to lack of concentration. There is also a need to boost the learning resources in the schools so that learning is effective and helps students to pass the examinations first time, and so do not have to repeat. The curriculum also needs to be re-engineered to focus more on practical skills that will help students earn a living even if they do not pass the written examinations, as one school head observed:

I think the solution lies in the curriculum. We need a joint curriculum to cater for students who can handle the academic type of examination that ZIMSEC is offering. We also need another system like we used to have in the F2 system, which catered for students with a vocational orientation, and helped them get

useful skills. We can have an academic curriculum running parallel to a vocational curriculum in a school and different examinations set for those pupils.

f. The curriculum

The school heads deemed the curriculum unsuitable for the needs of the rural students and their communities, as it put too much emphasis on academic demands. Yet most of the students in Rural Day Secondary Schools are academically weak, as evidenced by their failure of the Grade 7 examinations. The curriculum dilemma was summarized by one school head as follows:

I think our curriculum in the Rural Day Secondary Schools is limited and is too academic. It would serve better urban children, I think. I wish we could have a situation where we teach the child so that he remains in the area, gainfully employed. That child would be an inspiration to those pupils still at school to work hard as they will see value in education. If we could have fashion and fabrics, technical graphics, food and nutrition and other practical subjects taken seriously it would be better.

Another head supported a vocational curriculum by saying, “Such subjects like agriculture, building studies and home economics may be useful. The ministry seems to think that everybody can pass “O” level, which is a mistake and a waste of resources.” The curriculum was deemed not to be relevant to the aptitudes of most rural students. The curriculum forces students to work for paper qualifications which at times do not help even the students who pass to get jobs, so there is need to vocationalise the curriculum, to prepare students for life after school. The view that the curriculum is unsuitable is consistent with the observation by Zvogbo (1986:64) that it seems government has accepted the fallacy that academic education is the answer to problems of under development despite considerable evidence to the contrary. Zvogbo (1986:65) further argues that the result of subscribing to this fallacy has been that the majority of secondary school students fail to proceed to higher education or professional training due to low pass rates.

The heads pointed out that a vocationalised curriculum would help the schools to generate their own income to address the problems of dropouts and shortage of resources. One head argued:

These are subjects, which the pupils could be taught in a rural school and with or without a pass they will be able to make a living, and I think that is what is important. But if taken seriously the practical subjects can fund themselves as the school can sell products and services produced by the students as they learn.

This would help the students to contribute to the financing of their own education and leave school with skills that would help them fit in the job market. This would be in keeping with the view of Deming, cited by Hoy, *et al* (2000:2) that, “A product or service has quality if it helps somebody and enjoys a sustainable market.” Natarajan (1993:47) also shares a related view of quality of education when he posits that one indicator of the quality of education of an institution is the employability of its students after course completion.

g. Distance between school and home

The school heads pointed out that some students walked between 12 and 15 kilometers one way from home to school, and the first thing they do when they get to school is to “doze off” because of fatigue. When they get back home they cannot even study, or do their homework, and as a result fail their examinations, or opt to drop out of school. This was emphasized by a school head, who said:

The distance of the child’s home from the school affects the child’s performance. In a situation where pupils, have to walk, twelve kilometers, or so, it really affects their performance. They will be tired as they reach the school. Even if there are any revision lessons over the weekend or during the course of the week, it becomes difficult for them to concentrate because they would have walked long distances.

Echoing a similar observation on the adverse effect of the distance travelled by students to school on student performance another school head said:

...these students, walk long distances so when they get to school they will be very tired. For example, here we have students who walk more than 10 kilometers one way to school. The first thing they do is to doze and sleep whilst I teach. So fatigue emanating from long distances actually militates against quality of education.

A third school head concurred with these observations when he said, “Yes, the distance does create a problem. Some pupils walk about fifteen kilometers one way every day. It’s quite long and they get to school very tired and can’t concentrate. This affects their learning.” In fact, it can be argued that these students spend more time walking between school and home than learning.

The government policy of having secondary schools at least 11 kilometers apart has not been adhered to strictly, partly because some rural areas are so sparsely populated that some schools would be unviable in terms of student enrolments. To address the problem of distance the school heads suggested that low-cost boarding facilities be added to the existing Rural Day Secondary Schools to cater for students who come from afar as pointed out by a school head who said, “The ministry can introduce low-cost boarding schools, where the child will come and live next to the school, with his own bedding, etc. It may work.” This was viewed to be a cheaper option than constructing new schools, some of which may not have very many students. Another strategy suggested was to establish satellite secondary school classes in existing primary schools. This would ensure secondary schooling for all the children, which is an indicator of internal efficiency of an education system (Moyo & Mubengegwi 1995:62-74).

h. Calibre of students entering Rural Day Secondary Schools

It emerged from the interviews with the school heads that the majority of students enrolled in Rural Day Secondary Schools would have failed the primary school Grade 7 examinations. The students thus find it difficult to cope with the secondary school curriculum and are bound to fail the “O” level examinations. Observed one school head:

But the other problem is that the Rural Day Secondary Schools do not accept on the basis of Grade 7 examination results. There is no screening, and they just accept everybody regardless of performance. At the end of the day those students affect the pass rates, unlike in the boarding schools and established schools where there is some selection and acceptance only of those who will have passed Grade 7.

A similar view was upheld by another school head, who, had this to say about the calibre of students enrolled in Rural Day Secondary Schools:

The other point is that these schools cater for students who may simply not be ready to learn secondary school material. They do not discriminate in terms of passes from Grade 7, but just get all those who come to register, whether they have passed their primary education or not.

School managers and senior teachers alluded to the same view during the focus groups (section 5.3.1.1 (c)). The same observation is made by Nziramasanga (1999:303). This compromises the internal efficiency of Rural Day Secondary Schools as DFID (2000:1) and Moyo and Mubengegwi (1995:62-74) emphasise that pass rates are a critical indicator of the internal efficiency of a school system.

There is a need therefore to screen students entering Rural Day Secondary Schools to ensure that only students with the potential to pass the “O” level course are enrolled to avoid wasting resources and time on students whom it is known will fail even before they start. Those who fail the Grade 7 examinations should be put on a more practical-skills oriented curriculum. Ultimately the Rural Day Secondary Schools may need to pursue a dual curriculum: one academic for the few students who pass the Grade 7 examinations, and a vocational curriculum for the majority who fail the Grade 7 examinations, as one school head summarized it:

I think the solution lies in the curriculum. We need a joint curriculum to cater for students who can handle the academic type of examination that ZIMSEC is offering. We also need another system like we used to have in the F2 system, which catered for students with a vocational orientation, and helped them get useful skills.

i. Student discipline

School heads observed that some students often played truant, absconded from school and indulged in substance abuse. One school head pointed out, “But, there is also the problem of the discipline of pupils, with some of them absconding.” The school heads also expressed concern about the prevalence of schoolgirl pregnancies, a trend confirmed by the quantitative analysis (see Table 5.11). All these factors tend to interrupt the learning process, and lead to such wastages as high failure rates, dropouts, and repetition. All these are indicators of low internal efficiency of Rural Day Secondary Schools (Natarajan 1993:11; Moyo & Mubengegwi 1995:62-74).

The suggested strategy to deal with the problem of student discipline was for schools to set up strong guidance and counselling units that will assist students to behave in a manner that promotes effective learning. The strategy was summarized by one school head as follows, “There is also need to have guidance and counselling sessions using specialists and senior teachers in the school. This can include issues of HIV/AIDS and the dangers of early, unplanned pregnancies.” Parents and specialists in dealing with deviant behaviour can also be brought in to assist. Each school must also have a clearly communicated code of conduct that will guide student behaviour. Schools working through BSP (Z) can also conduct research on the causes of indiscipline, and use the findings to address the problem from an informed position, suggested one school head.

j. Attitudes towards school

Some parents and students were said to exhibit negative attitudes towards school. At times parents do not pay fees for students due to unwillingness, rather than inability to pay. They argue that government must finance education. At times they force students not to attend school by assigning them some household chores during school time. “Parents ask their children to stay away from school so if these parents are educated they will know that absenteeism militates against good quality of education,” said one school head. Another remarked, “Pupils who absent themselves from school miss out on lessons

and some critical concepts.” This ultimately leads to students failing their examinations and thus lowering the internal efficiency of Rural Day Secondary Schools.

An education programme to conscientise parents on the value of education and the need to participate fully in the education of their children needs to be launched, the heads argued. The government should also enforce the policy of compulsory education, and any parents found to be willfully denying children education should be prosecuted. The students need guidance and counseling to appreciate the need to take education seriously. Above all government must widen employment opportunities to encourage students to work hard with the hope of getting employed when they pass.

k. Disease

HIV and AIDS were said to affect teachers, parents, and students in Rural Day Secondary Schools. Commenting on the HIV and AIDS problem a school head said, “There is also the problem of HIV and Aids, which kills parents and leave the children without anyone to provide for their school needs. But the problem also affects teachers as well.” This trend was echoed by another school head who, said, “With the HIV and AIDS problem some parents and guardians are dying leaving children alone, and some come from child-headed homes due to the effect of the HIV and AIDS pandemic.” Referring to the HIV and AIDS problem another school head said, “From experience that one is the greatest threat before us right now. Our students...travel long distances to school and we are looking at boys and girls traveling together in thick forests. The temptation to indulge in unsafe sex is very high.” It was also noted that the death of teachers leads to high staff turnover, which disrupts the teaching/learning process. The death of parents, leaves students orphaned and with no one to pay school fees for them. Ultimately they drop out of school thereby compromising the internal efficiency of Rural Day Secondary Schools.

School heads, suggested that schools need to introduce community-wide AIDS education programmes to assist both the infected and the affected. This would help the infected to live longer and contribute to the education of their children, and it would help the

affected to cope with the attendant trauma of HIV and AIDS. The government ought to channel part of the money raised through the National AIDS Levy to the education of students who are victims of the disease, to help them complete their schooling.

l. Infrastructure

While Rural Day Secondary Schools now have reasonably sufficient classrooms, there is still shortage of specialist buildings like laboratories and libraries, and this compromises the quality of teaching of certain subjects. Commenting on the availability of infrastructure in Rural Day Secondary Schools a school head said there were enough classrooms, "...but more still has to be done in terms of specialist classrooms like the libraries, and laboratories." Communication and transport networks to some schools still present a challenge, as observed by one of the school heads who said, "Staff accommodation and transport also contribute to high staff turnover, which disrupts the learning process." The shortage of infrastructure lowers the morale of teachers, and low teacher morale adversely affects the quality of education (Natarajan 1993:11).

There is need to speed up the completion of libraries and laboratories in the Rural Day Secondary Schools, as pointed out by a school head who said:

The building of libraries in Rural Day Secondary Schools should be undertaken so that pupils get more reference books and more reading materials. I also feel that physical structures like science laboratories are vital so that pupils can learn the subject properly.

It may be cheaper to pool together resources and build bigger and better equipped libraries at the BSP (Z) cluster centres than to have each school trying to have an individual library, a school head pointed out. Programmes such as the Rural Electrification Programme must target the most remote areas first to help boost the morale of teachers so that they work better.

m. The Quality Assurance Division

School heads, like school managers and some senior teachers (see section 5.3.1.3 (c)), argued that the Quality Assurance Division has collapsed to a level where it is virtually non-existent in the life of Rural Day Secondary Schools. One school head said of the Quality Assurance Division, “There is also the Quality Assurance Division where Education Officers are supposed to be helping teachers, but they are almost non-existent. You will be lucky to see them once a year in a school.” He was supported by another, who said, “You rarely see Education Officers moving into schools trying to assess and assist teachers in terms of teaching strategies and subject content.” On average Education Officers had not visited Rural Day Secondary Schools in the last four years, and there is limited communication between them and the schools. Meanwhile a lot has gone wrong. The failure by Education Officers to visit Rural Day Secondary Schools is consistent with findings by Grauwe (2001:103) that by 1997 the average number of years between visits to rural schools by Education Officers was 4.22 years. This trend is against the view of Oakland (1995:13) who says, “Quality assurance is broadly the prevention of quality problems through planned systematic activities including documentation.” It can be argued that in real terms there is no quality assurance for Rural Day Secondary Schools, so the quality of education is compromised.

The school heads suggested that Education Officers should work through the BSP (Z) programme to assist schools. They argued that Education Officers must be based in cluster centres where they will be more accessible to the schools, rather than at the district centre or regional centre. Given that there may not be enough resources to employ as many Education Officers, the heads suggested that BSP (Z) cluster resource persons can be trained in quality assurance and the Education Officers be either phased out, or redeployed as cluster resource personnel, as it is only from the cluster that it is possible to maintain continuous contact with rural schools and pursue genuine quality assurance.

5.4 SUMMARY

The survival rates of students in Rural Day Secondary Schools are low, and they are higher for female students than for male students. Survival rates are low due to dropouts attributed chiefly to failure to pay school fees and students who dropout without explanation. It also emerged that there was a major disparity between recorded dropouts and attrition rates observed through analysis of the survival rates, suggesting that records kept at the schools may not be accurate. Some students still travel very long distances to school and this affects their performance. The problem of students repeating classes is prevalent, especially at Form 3 and Form 4. “O” level examination pass rates of Rural Day Secondary Schools are lower than national pass rates. Low pass rates are a result of lack of resources, low teacher morale, and long distances travelled by students, among other reasons.

The findings show that the quality of education of Rural Day Secondary Schools is affected by both negative and positive factors. On the positive side, BSP (Z), ZIMSEC and SDCs have made a significant impact. Teacher supply was viewed to be at satisfactory levels, except for specialist teachers, with most teachers appropriately qualified, a position that is also supported by Chifunyise (1998:11) when he points out that by 1998 untrained teachers in secondary schools constituted only 10%. The qualifications of school heads have also improved with the majority of school heads being graduates, and some having post graduate qualifications. Provision of infrastructure in the form of classrooms, through the efforts of SDCs, has also reached satisfactory levels, although there is still a need for specialized infrastructure like laboratories.

General management of programmes such as BSP (Z), ZIMSEC and the Quality Assurance Division still lacks efficiency, and there has not been sufficient training for SDCs, and on the Clients’ Charter. The next chapter presents the summary, conclusions and recommendations of the study, in detail.

CHAPTER 6: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter presented an analysis and discussion of the findings of the study. The aim of the study was to analyse the quality of education of Rural Day Secondary Schools through determining such indicators of internal efficiency as enrolment ratios; survival rates; dropout rates, repetition rates and pass rates. The study also sought to analyse the factors that affect the quality of education of Rural Day Secondary Schools. This chapter presents the summary of the main findings, the conclusions and recommendations of the study. Recommendations for further research are also proffered.

6.2 SUMMARY

The study sought to analyse how the management of the quality of education of Rural Day Secondary Schools has been affected by the internal efficiency of the school system. In particular the study sought to answer the following specific research questions (see section 1.2):

1. What are the different levels of internal efficiency of Rural Day Secondary Schools for the cohorts that were enrolled in Rural Day Secondary Schools from 1999 to 2003?
(Indicators of internal efficiency include survival rates; dropout rates; repetition rates, and pass rates).
2. What are the variations in levels of internal efficiency of Rural Day Secondary Schools for the cohorts that were in school from 1999 to 2003, for students of different sexes, ages and levels of schooling?
3. What are school managers' (including some senior teachers) views of the programmes that were established to improve the quality of education of Rural Day Secondary Schools?
4. What strategies do school heads think can be implemented to improve the quality of education of Rural Day Secondary Schools?

The first chapter of the study presented the background to the study, and why it is important to analyse the internal efficiency of Rural Day Secondary Schools, and how the internal efficiency has affected the quality of education. It is important to analyse the quality of education in any country so as to be able to account for heavy investments made by government in education. In Zimbabwe in particular there was massive expansion of educational provision especially for rural areas and it is important to ascertain if these schools are meeting their intended targets. The second chapter was a review of literature relating to the quality of education. The quality of education is a multi-faceted phenomenon that can be analysed both quantitatively and qualitatively, using several indicators. At all times the quality focus must converge on satisfying the customer. There are several reasons for pursuing the quality debate and these include government accountability, globalisation; allocation of resources, and giving value for parents' money (section 2.5). If quality is not installed, there are always costs to be incurred for the lack of quality (section 2.6). Several models of analysing quality are also available and they include among others Deming' TQM; the Shewhart Cycle and Crossby's Zero Defects Model (section 2.3). To trace students' flow through a school system indicators of internal efficiency are used (section 2.8). Barriers to quality of education include household barriers, policy barriers and educational barriers (section 2.9).

The third chapter presented a review of literature relating to the establishment of Rural Day Secondary Schools in Zimbabwe, and the quality issues relating to the schools. It emerged that before independence there was limited access to secondary education by rural communities (section 3.2), as available schools were few and expensive. To ensure that rural people had access to secondary education the government embarked on a programme to construct Rural Day Secondary Schools that could be accessed even by the poor. By 1997 the number of secondary schools in the country had increased from 177 in 1979 to 1 531, 70% of which were in rural areas (section 3.4). The new schools faced a number of problems including lack of teachers; lack of resources and infrastructure; long distances that students walked to school as well as limited finance (section 3.5; section

3.6). Several programmes have since been established to try and address the quality of education in these schools (section 3.7).

The fourth chapter described the research methodology and the procedures for collecting empirical data for the study (Borland 2001:5). Both quantitative and qualitative techniques were used to collect data for the study. For the quantitative phase of the study data on internal efficiency of the 97 Rural Day Secondary Schools in one region were collected. For the qualitative phase of the study focus groups were conducted with school managers, and personal interviews were conducted with school heads. Participants were conveniently sampled (section 4.3.1; section 4.3.2).

The fifth chapter presented and discussed the results of the study. Generally Rural Day Secondary Schools were characterized by low internal efficiency. The schools face a lot of problems that hinder the quality of their education. Participants in the focus groups and personal interviews proffered several suggestions that can be adopted to improve the quality of education of Rural Day Secondary Schools. The sections that follow give a summary of the findings of the study

6.2.1 Summary of findings from literature review

6.2.1.1 Findings from literature relating to the quality of education

Literature revealed that the quality debate came with the advent of industrialisation as the need to ensure that products conformed to specification escalated and customers began to demand value for money (Wadsworth, *et al* 2002:98). At this stage the focus was on product, rather than process quality. Later on quality became linked to services like education, law and medicine (Sallis 1996:6; Wadsworth, *et al* 2002:98). Liston (1999:11) posits that the infusion of quality and service concepts, drawn from the business world and adapted to meet the specific environments of educational institutions, began to drive educational reform (section 2.2). The quality debate has evolved through the following phases: Quality as an integral element of craftsmanship; Quality control by foremen;

Inspection based quality control; Statistical process control; Quality assurance/total quality control by the quality department; Total quality management (TQM); and TQM – the culture of continuous improvement that is organization-wide.

In section 2.3 several definitions of the quality of education emerged. The definition of the quality of education converges on the analysis of information that might be employed to guide decisions about the provision of education (Hoy, *et al* 2000:10). Quality in education is an evaluation of the process of educating which enhances the need to achieve and develop the talents of the customers of the process, and at the same time meets the accountability standards set by the clients who pay for the process or the outputs from the process of educating (Hoy, *et al* 2000:10). Quality was also viewed as being the fitness of a service or product for use, and the satisfaction of agreed customer needs (Wadsworth, *et al* 2002:15). Quality of education can also be viewed as what is good for the school and its students (Hoy, *et al* 2000:2).

Customers are central to the pursuit of quality (section 2.3.1). Customers can either be internal or external and there is a need to satisfy both categories if quality is to be realized (Bell, McBride & Wilson 1994:3; Huxtable 1995:53). Gatiss (1996:17) emphasizes that quality is about people and not things in a school. Quality also entails instituting effective leadership (section 2.3.2). Steyn (1999:21) argues that leadership should strive for the involvement of all stakeholders in pursuing a vision that has been set by the leadership. In addition to effective leadership another critical dimension of quality is training (section 2.3.3). Creech (1994:90-91) sums the importance of training in TQM when he argues that training of people extensively and at every level plays a vital role in transforming an organization.

Strategic planning is an effective tool for total quality management (section 2.3.4). This view is supported by Steyn (1999:23) who points out that the need to conceptualise what to do is the first step towards quality, a view shared by Sallis (1997:105) who says strategic planning enables the formulation of long term priorities. Shipengrover and Conway (1996:36) say strategic planning also helps to clarify and sell the vision that the

leadership will have set. Once the vision is accepted and shared by all players it becomes easy to implement quality (Frazier 1997:105; Daugherty 1996:83). Commitment to continuous improvement ensures that quality is sustained (section 2.3.6), a view which is supported by Bonstingl (1996:16) and Frazier (1997:16).

Section 2.3.7 revealed some examples of institutions that have applied TQM principles in education. These include a school in South Africa that was able to increase its resources as a result of applying the quality model (Hayward & Steyn 2001:106-108). Another illustration of the successful application of TQM to education, cited by Cotton (2001:4-10) is the “Mt Edgecembe High School’s Modified Deming Points for Quality in Education,” an adapted version of Deming’s fourteen points for quality in organisations.

Eight models of quality that can be applied in educational setups also emerged (section 2.4). These include Quality Control; Quality Assurance; Creating Quality Communities of Learners Through Quality Management; Philip B Crosby’s Zero Defects Model; Joseph Juran’s Project Management; Malcom Baldrige’s Quality Criteria; Deming’s Total Quality Management; and Shewart’s Cycle, (Sallis 1996:19-50; Danks 1996:471; Oakland 1995:13; Morehouse 1996:34).

Several reasons for analyzing the quality of education emerged. One is government accountability (section 2.5.1). Government funds education and it expects the education system to be accountable. Other reasons include improving access to education (section 2.5.3); value for parents’ money (section 2.5.4); economic development (section 2.5.5), and technological pressure (section 2.5.6). All these reasons exert pressure for the continuous examination of how education systems are performing (Ross 2002:8; Kanji 1995:432). There is also the pressure presented by globalization (section 2.5.8); future allocation of resources (section 2.5.9) and anticipating customer needs (section 2.5.10). These views are observed by Ross (2002:7); Peano (2002:8) and Greenwood and Gaunt (1994:26).

It also emerged that costs of correcting unquality work far outweigh the costs of instituting quality in the first place (section 2.6). Ruskin (1992:1) says, “Quality is never an accident. It is always the result of intelligent effort. It is the will to produce a superior thing.” There are basically three types of quality costs according to Greenwood and Gaunt (1994:82) and these are: failure costs; appraisal costs and prevention costs. Failure costs fall into internal failure costs and external failure costs.

There are several indicators of the quality of education (section 2.7) that emerged. Yin (1996:58) observes that, “Evaluation of school performance must focus on multi-level and multi-facet indicators including inputs, process, and outputs of schooling in addition to academic development of students.” Other indicators of the quality of education posited by Natarajan (1993:11); Moyo and Mubengegwi (1995:62-74) and DFID (2001:1) include the following:

- Literacy percentage;
- Dropout and retention rates;
- Enrolment of children in various age groups;
- Contribution to the world of knowledge;
- Emergence of eminent personalities;
- Social relevance and secular character of education;
- Technical and scientific manpower;
- System of examinations and certification;
- Morale of the teaching profession
- Growth rate;
- Promotion rates;
- Transition rates;
- Internal efficiency (survival rate; average study time per graduate; wastage ratio);
- Teacher supply (qualifications and utilisation rates of teachers);
- School buildings and utilisation rates of classrooms;
- Conditions of learning (supply of furniture and textbooks);

- Pass rates.
- Completion rates; and
- Learning achievements.

Internal efficiency of the school system focuses on the student flow analysis, given that one of three things happens once students are enrolled in a school system. The three things are that: students may be promoted to the next level; students may repeat a level; and the students may drop out of the school system completely (section 2.8). IIEP (2001:14) and Moyo and Mubengegwi (1995:68) identify the following indicators of internal efficiency: transition rate (section 2.8.1); repetition rate (section 2.8.2) dropout rate (section 2.8.3); survival rate (section 2.8.4); study time per graduate (section 2.8.5); pass rate (section 2.8.6); and wastage ratio (section 2.8.7).

Five types of barriers to the quality of education were raised and discussed (section 2.9). According to UNICEF (2002:2) these are household barriers; policy barriers; infrastructure barriers; community beliefs and practices and educational barriers. Some of the countries that have made some deliberate efforts to target the quality of education in rural areas with some success are Burundi (section 2.10.1); Co'te d'Ivoire (section 2.10.2); Sri Lanka (section 2.10.3) and Thailand (section 2.10.4).

6.2.1.2 Findings from literature relating to Rural Day Secondary Schools in Zimbabwe

Rural Day Secondary Schools were established as a way redressing the imbalances that existed in the colonial past in the education system, and also to increase access of secondary education to rural people (section 3.1). According to Gatawa (1998:29) the 1966 Education Plan prescribed that only 12½% of students completing Grade 7 would go into the F1 secondary education system, which was purely academic; 37½% would go into the F2 secondary education system, and at independence there were 197 secondary schools, run mainly by government and missionaries that charged exorbitant fees (Dorsey, *et al* 1991:23). Gatawa (1998:14) observes that, "The rural poor could not send their children there," while Chifunyise (1998:11) also observes that at independence the

rural population was the most disadvantaged with regards to secondary education, hence the government embarked on an ambitious programme to set up Rural Day Secondary Schools where parents provided labour and building materials. This resulted in an expansion programme that realized a total of 1 531 secondary schools by 1997, 70% of which were in rural areas.

The newly constructed schools faced problems of infrastructure (section 3.5.1); low student achievement (section 3.5.2); accessibility of the schools due to distances students walked to the schools (section 3.5.3); and the curriculum dilemma (section 3.5.4), as Gatawa (1998:14) says the programme was a pure import of the Cambridge education system that did not take into account the needs of rural people. There was also the problem of limited financial support (section 3.7). The following programmes were put in place to try and address quality issues in Rural Day Secondary Schools: BSP (Z) (section 3.7.1); ZIMSEC (section 3.7.2); the Clients' Charter (section 3.7.3); SDCs (section 3.7.4); the Quality Assurance Division (section 3.7.5) and the Presidential Commission of Inquiry into Education and Training (section 3.7.6). Gatawa (1998:21); Nziramasanga (1999:303) and (IIEP 2001:215) point out that survival rates, and pass rates were low in Rural Day Secondary Schools, with a very high incidence of dropouts.

6.2.2 Summary of findings from the quantitative study

The findings from the quantitative phase of the study are based on the indicators of internal efficiency of the school system analysed in the study. These were enrolment trends, survival rates, dropouts, repetition, and pass rates.

6.2.2.1 Enrolment trends

Enrolment was highest at Form 1, followed by Form 2, and Form 3, and it was lowest at Form 4, showing that students were lost by the school system as they went up the levels of learning (section 5.2.1). In fact, for the period under study average Form 4 enrolment

was 57.4% of Form 1 enrolment. At Form 1 there were more males (51.4%) than females (48.6%), but at Form 4 there were more females (52.1%) than males (47.9%).

There were many overage students enrolled in the schools, and there were more male overage students than female students. For instance, in Form 1, 33.3% of the students enrolled were overage, and of these 59.6% were male.

6.2.2.2 Survival rates

Analysis of students' progression through the levels of schooling revealed a low survival rate (section 5.2.2). On average the survival rate from Form 1 to Form 4 was 57.4%. Survival rates at all levels were higher for female students than for male students. The highest drop occurred between Form 2 and Form 3 for both male and female students. Findings from literature also confirm the inability of students from rural and poor families to survive the full length of the secondary school course (Gatawa 1998:10; Bray *et al* 1986:62).

6.2.2.3 Dropouts

A high incidence of school dropouts was revealed by the analysis (section 5.2.3). The highest number of recorded dropouts occurred at Form 3, followed by Form 2 for both male and female students. The most significant cause of school dropouts was recorded to be failure to pay school fees, which accounted for 80.1% of the recorded dropouts. The other notable causes were unexplained reasons and schoolgirl pregnancy. Findings from literature concur that dropouts may be caused by examination and school fees, which rural parents cannot afford (IIEP 2001: 216; Dorsey, *et al* 1999:23; Gatawa 1998: 21).

6.2.2.4 Repetition

At least 4.1% of the students in the cohorts under study repeated a class (section 5.2.4). The number of students repeating classes was found to be highest at Form 4 and lowest at

Form 1. Repeaters at Form 4 constituted 56.5% of all recorded repeaters. Of all the reported cases of repetition males constituted 47.6%, while females constituted 52.4%. This observation is consistent with literature by Bray *et al* (1986:62) who argues that high repetition rates are prevalent among low-income groups.

6.2.2.5 Unaccounted for students

During the data analysis it emerged that a lot of students were lost by the school system, but were not accounted for through recorded dropouts and recorded repeaters (section 5.2.5). In total 22.3% of students enrolled in the schools in the period under study were not accounted for and this figure represents 75.4% of total attrition.

6.2.2.6 Pass rates

The average “O” level pass rate for the period under study was 9.8%, which was lower than the national average pass rate of 14.6% (Maramba 2001:217) (section 5.2.6). Literature findings also confirmed that pass rates of Rural Day Secondary Schools are lower than the rest of the other schools (Dorsey, *et al* 1991:25; Mutumbuka 1986:116). In all cases pass rates were higher and less varied for male students than they were for female students. Pass rates also fell after 1999 for both male and female students and they have not risen to those levels again.

6.2.3 Summary of findings from the qualitative study

The qualitative phase of the study addressed research question 3 and research question 4. Research question 3 sought to elicit the views of school managers (including some senior teachers) of the programmes that were established to improve the quality of education of Rural Day Secondary Schools. Research question 4 sought the views of school heads on the strategies that can be used to improve the quality of education of Rural Day Secondary Schools.

The programmes that were introduced to improve the quality of education of Rural Day Secondary Schools are BSP (Z); ZIMSEC; the Quality Assurance Division; the Clients' Charter and SDCs.

6.2.3.1 Improving the quality of education of Rural Day Secondary Schools

School managers (including some senior teachers) participated in focus groups to discuss the programmes that were introduced to improve the quality of education of Rural Day Secondary Schools. Findings from the focus groups are presented below.

a. BSP (Z)

The programme was viewed to have the potential to improve the quality of education of Rural Day Secondary Schools through staff developing teachers, and allowing schools to share limited resources, and serve as a resource centre. The programme has introduced awards that enhance competition among both students and teachers, and has managed to install computers in district and regional centers. These developments have helped to improve the quality of education (section 5.3.1.1).

However, the programme has failed to reach out to the very remote schools, which need more assistance (section 5.3.1.1). It was also perceived that the programme lacked transparency and accountability in relation to handling of finances and appointment of staff. The programme needs to adopt a more participatory approach and mobilise more resources.

b. ZIMSEC

ZIMSEC was viewed as a programme that has improved the accessibility and affordability of "O" level examinations even to rural people (section 5.3.2.1). Literature by Murira (2001:9) supports this view. The programme faces problems of examination leakages, poor timing of events, errors in the processing of examinations, and a

perception that its certificates are inferior to Cambridge certificates. Sibanda (2001:9) acknowledges that examination paper leakages do occur.

The programme needs to improve on its transparency and employ only highly qualified people to set and mark examinations, and pay these people well to motivate them and maintain continuity, according to the participants. There is also a need to charge economically reasonable fees to increase the revenue base, and also a need publicise a diary of events in good time.

c. The Quality Assurance Division

While school managers and some senior teachers admitted that the division has the potential to improve the quality of education of Rural Day Secondary Schools if properly run, they felt that at the moment the division serves no purpose as the Education Officers have not been visiting schools for almost four years (section 5.3.1.3). The general feeling was that the division should be incorporated into the BSP (Z) rather than duplicate services. The inability of Education Officers to visit rural schools is confirmed by Grauwe (2001:103).

d. The Clients' Charter

The Clients' Charter was viewed as a tool that has the potential to improve the quality of education of Rural Day Secondary Schools, but has not achieved anything to date because no proper training of the people involved was done on the Clients' Charter (section 5.3.1.4). The school managers and some senior teachers suggested that the training for all stakeholders be started afresh and a mechanism of monitoring the implementation of the Clients' Charter be put in place.

e. SDCs

SDCs have contributed in terms of erecting classrooms and teachers' accommodation in the Rural Day Secondary Schools (section 5.3.1.5). They have also procured teaching and learning materials that have helped to improve the quality of education of Rural Day Secondary Schools.

However, school managers observed that at times SDCs resist the raising of school fees to reasonable levels, so they need training to understand basic budgetary concepts to appreciate the need to raise fees. SDC members were also viewed to be largely illiterate and thus need training in literacy and understanding of government policy on education.

6.2.3.2 Strategies that can be used to improve the quality of education of Rural Day Secondary Schools

School heads proffered a number of strategies that can be employed to improve the quality of education of Rural Day Secondary Schools, based on both the positive and negative factors that affect the quality of education of Rural Day Secondary Schools.

a. Increased funding

School heads argued that government and the corporate world should increase funding to Rural Day Secondary Schools, as they are disadvantaged (section 5.3.2.1; section 5.3.2.2(a); section 5.3.2.2(b)). It may even be necessary to reduce subsidies to other school types and channel the money to Rural Day Secondary Schools, which are currently financed by parents who are economically vulnerable. Increased funding would enable the schools to buy necessary learning materials and pay school and examination fees for needy students, and thus curtail the problem of dropouts, which constitutes a waste of resources.

b. Curriculum innovation

School heads argued that there is need to re-engineer the curriculum so that those students who are academically weak can pursue a more practically oriented curriculum that will teach them skills they can use in life even without academic certificates (section 5.3.2.2(c); section 5.3.2.2(f)). This would reduce failure rates, and the incidence of students coming back to school to repeat after failing the “O” level examinations. It would also ensure that students can engage in some self-employment after school even without further education. The need for a practical-oriented curriculum is supported by Zvogbo (1986:59).

c. Low cost boarding facilities and satellite classes

School heads suggested that to deal with the problem of students who travel long distances to school and ultimately perform poorly, or drop out of school low-cost boarding facilities should be introduced in existing Rural Day Secondary Schools, and satellite secondary classes be opened in existing primary schools (section 5.3.2.2; section 5.3.2.2(f)). This would be cheaper than building new schools, but it would ensure that students have easy access to schooling.

d. Guidance and counseling

It was suggested that schools set up strong guidance and counseling units to deal with student discipline, curbing of dropouts and helping those affected by disease to cope with their school work (section 5.3.2.2).

e. Teacher incentives

It was deemed important to give teachers incentives that will encourage them to work hard in rural schools (section 5.3.2.2; section 5.3.2.2(f)). This will also reduce staff turnover, which breaks the continuity of the teaching process.

f. Infrastructure

School laboratories and libraries should be completed to enhance effective teaching. Rather than build a library in every school, bigger and better resourced libraries should be built at the BSP (Z) cluster resource centres (section 5.3.2.2), the school heads suggested.

g. Quality Assurance Division

The school heads felt that the division was underutilized and its impact was not felt in the schools (section 5.3.2.2). To make it more effective it was suggested that the division be integrated into the BSP (Z) clusters, and have Education Officers play an active role in directing the quality of education in rural schools.

6.3 CONCLUSIONS

The following conclusions are drawn from the analysis of the data collected in the study, and are given as answers to the four research questions posed at the start of the study (section 1.2).

6.3.1 Levels of internal efficiency

- Rural Day Secondary Schools enroll a significant number of students who are above the official school-entry age. At least 30% of the students in school at the time of the study were overage.
- Survival rates of Rural Day Secondary Schools are low, and average just below 60% of Form 1 enrolment.
- Dropout rates in Rural Day Secondary Schools are very high, mainly due to inability by students to pay school and examination fees. Other causes of dropouts are pregnancy, the long distances between school and the students' homes, and the effects of HIV and AIDs.

- Repetition of classes is happens in Rural Day Secondary Schools due to failure to raise school fees in time and the incidence of students who fail the “O” level examinations and then return to repeat. At least 4.1% of students enrolled in the schools in the period covered by the study repeated a class.
- “O” level examination pass rates for Rural Day Secondary Schools are lower than national pass rates. For the years under study the average pass rate was 9.8%. Some of the reasons for the low pass rates are the enrolment of students who are academically inferior; lack of resources; low teacher morale and the long distances walked by the students to school. The nature of the curriculum also contributes to the low pass rates.

6.3.2 Variations in levels of internal efficiency

- There are more male students in Form 1 than female students, but there are more female students than male students in Form 4 in Rural Day Secondary Schools.
- Although recorded dropouts appear higher for female students than for male students, analysis of the actual attrition shows that dropouts are in fact higher for male students than for female students in Rural Day Secondary Schools.
- Survival rates are higher for female students than for male students in Rural Day Secondary Schools.
- There are more male overage students than female overage students at all levels of schooling in Rural Day Secondary Schools.
- There are more female students who repeat classes than male students in Rural Day Secondary Schools.
- “O” level examination pass rates are higher for male students than for female students in Rural Day Secondary Schools.

6.3.3 Improving the quality of education of Rural Day Secondary Schools

Several conclusions were drawn from the focus groups with school managers (including some senior teachers.) The conclusions are presented below.

- School managers viewed all the programmes as having the potential to improve the quality of education of Rural Day Secondary Schools, but were not satisfied with the implementation and management of the programmes. On a positive note BSP (Z) has introduced awards which have motivated both teachers and students, set up some resource centres with useful equipment and assisted teachers and school heads with staff development. ZIMSEC has improved access to the “O” level examinations and made the examinations more relevant to rural students.
- School managers felt programmes like ZIMSEC and BSP (Z) lacked both accountability and transparency.
- BSP (Z) was viewed as the most effective programme, while the Quality Assurance Division was viewed as the least effective programme.
- School managers felt in all programmes there was need for serious and continuous training.

6.3.4 Strategies for improving the quality of education of Rural Day Secondary Schools

Personal interviews were held with school heads to discuss strategies that can be used to improve the quality of education of Rural Day Secondary Schools. Conclusions from the personal interviews are presented below.

- School heads felt that there is a need to increase funding to Rural Day Secondary Schools significantly to improve the quality of education thereof.
- School heads felt that there is need to establish low-cost boarding facilities to cater for students who walk long distances to school.

- School heads felt that there is a need to finish up the construction of specialist infrastructure like laboratories and laboratories to enhance effective learning in Rural Day Secondary Schools.
- School heads felt that the curriculum for Rural Day Secondary Schools needs to be re-engineered to reflect the more practically oriented needs of rural communities, while the Quality Assurance Division has to be organized to supervise the schools effectively.
- Finally, the school heads felt there is need to have incentives to raise the morale of rural teachers.

6.4 RECOMMENDATIONS

Based on the findings of the study the following recommendations, which can be addressed by stakeholders such as the Ministry of Education Sports and Culture, school heads, parents and teachers, are made.

6.4.1 Need to conscientise parents on school requirements

The Ministry of Education, Sport and Culture needs to conscientise parents to send their children to school at the right age so as to improve the age specific enrolment ratios (section 5.2.1) This will ensure that students complete school, while they are still younger and less susceptible to dropout due to pregnancy or employment counter attractions. It will also ensure that if they enter the job market they will stay longer and their input therein will be for a longer period.

6.4.2 Screening of students entering Rural Day Secondary Schools

It is recommended that only those students who pass the primary school examination be allowed to enroll for the academic curriculum in Rural Day Secondary Schools. Nziramasanga (1999:303) notes that the chief reason for low pass rates is that Rural Day Secondary Schools enroll students who will have failed the primary school examinations,

so if only students who have passed the primary school examinations are allowed to pursue the academic curriculum in Rural Day Secondary Schools pass rates may be improved and repetition may be reduced. Those who fail the primary school examinations can be put through the alternative skills-oriented curriculum (see section 6.4.3).

6.4.3 Keeping of accurate records of students' flow

Schools should be encouraged to keep accurate records of students' flow through the school system to enable future planning that is based on accurate facts. It emerged in section 5.2.5 that a significant number of students were lost by the school system but were not accounted for. Absence of accurate data makes it difficult to plan the internal efficiency of the school system effectively.

6.4.4 Increasing financial aid to Rural Day Secondary Schools

Rural Day Secondary Schools are under-funded resulting in lack of resources; dropouts; and low pass rates (section 5.3.2.2(d)). There is a need to fund these schools meaningfully if their quality of education is to improve. Funding is needed to finish infrastructure; subsidise fees of poor students, and buy teaching materials.

6.4.5 Ensuring BSP (Z) reaches out to the remote schools

BSP (Z) has tended to benefit the more accessible schools at the expense of the more remote and more needy schools (section 5.3.1.1(c)). It is recommended that efforts be intensified to take the programme even to the most remote schools, and have accessible cluster resource centres. BSP (Z) ought to use a more participatory approach as it emerged in section 5.3.1.1(c) that there was lack of consultation by BSP (Z) staff.

6.4.6 Improvement of examination accountability and security

School managers felt ZIMSEC lacked accountability and transparency (section 5.3.1.2(c)), so there is need to improve on this. There have also been reported cases of examination paper leakages (section 5.3.2.1(c); section 3.7.2.5). Mechanisms should be put in place to ensure maximum security of examinations.

6.4.7 Improvement of payment of ZIMSEC markers

ZIMSEC markers are lowly paid and are not motivated to do a good job, and at times they leave marking (section 5.3.1.2(d)). It is necessary to raise their remuneration to reasonable levels so as to improve their morale and the quality of examinations marking.

6.4.8 Training on the Client's Charter

From section 5.3.1.4 it was evident that not sufficient training has been done on the Clients' Charter, yet participants felt it was a tool with the potential to improve the quality of education of Rural Day Secondary Schools. There is need therefore to restart the training and involve as many stakeholders as possible. There is also need to monitor the implementation of the programme (section 5.3.1.4(d)).

6.4.9 Empowerment of the Quality Assurance Division

From section 5.3.1.3 it emerged that the Quality Assurance Division has not been able to assist teachers in schools. It is therefore recommended that this division be empowered in terms of resources so that there is proper quality assurance that will improve the quality of education of Rural Day Secondary Schools.

6.4.10 Training of SDCs.

From section 5.3.1.5 and section 5.3.2.1(d) it emerged that SDCs have an important role to play in instituting the quality of education in Rural Day Secondary Schools, but the

SDCs lack basic understanding of their functions and educational policy, so there is need to train them to be effective.

6.4.11 Introduction of low-cost boarding facilities in Rural Day Secondary Schools

One of the biggest challenges facing Rural Day Secondary Schools' students is the distance between school and home, which they have to walk. This results in high dropouts and also negatively affects pass rates (section 5.3.2.2). To reduce the adverse effect of this problem low-cost boarding facilities should be introduced in Rural Day Secondary Schools to cater for those students who come from very far away from the schools.

6.4.12 Construction of libraries and laboratories

Most Rural Day Secondary Schools still do not have libraries and laboratories and this adversely affects the students' achievement (section 5.3.2.2(d); section 5.3.2.2(c)). There is a need to erect these facilities to improve the quality of teaching and learning in the schools.

6.4.13 Curriculum re-engineering

One of the causes of low pass rates in Rural Day Secondary Schools was deemed to be the curriculum, which was deemed unsuitable for most rural students (section 5.3.2.2(c); section 5.3.2.2(f)). It is therefore necessary to offer a more skills-oriented curriculum that will serve the needs of the students and their communities. In this way pass rates may improve.

6.4.14 Training of specialist teachers

Rural Day Secondary Schools still face a shortage of specialist teachers, and it is necessary to train these, and have them in place to enhance effective teaching of subjects like science and mathematics (section 5.3.2.2(d)). This may also improve the pass rates.

6.4.15 Morale of rural teachers

It emerged in section 5.3.2.2(d) that rural teachers are demotivated to work there because of poor living conditions and lack of incentives. It is recommended that efforts to improve living conditions in rural schools are pursued and incentives to attract teachers to rural schools are put in place. Teachers with a high morale are likely to improve the quality of education in general and pass rates that are currently very low (section 5.2.6).

6.5 RECOMMENDATIONS FOR FURTHER RESEARCH

6.5.1 Failure to account for students who leave school prematurely

A significant number of Rural Day Secondary Schools' students were lost by the school system and not accounted for, thus raising two possible areas for research. The first question is why is it that schools fail to account for such a large attrition of students? The second question is what activities are these dropouts involved in as a way of life? Research on these questions may help to improve records on student flows, and also help to work out programmes to engage the students gainfully who drop out of school.

6.5.2 The quality of management and instructional processes

This study established that the internal efficiency of Rural Day Secondary Schools is low, but this may be just a function of other in-school processes like management practices and classroom practice. Further research may be conducted on the quality of management and instructional processes in Rural Day Secondary Schools, to give a more comprehensive view of quality of education issues in these schools.

6.5.3 Comparative studies

It may also be necessary to conduct comparative studies to establish how Rural Day Secondary Schools in Zimbabwe compare with secondary schools in rural areas in other countries. This will provide a basis for realistic benchmarking of the standards in Rural Day Secondary Schools.

6.5.4 Impact of Rural Day Secondary Schools

Rural Day Secondary Schools have indeed improved access to secondary education by rural communities, but schooling is not an end in itself, rather is a means employment or professional training. To assess the full impact of Rural Day Secondary Schools a tracer study may be conducted to see how graduates from Rural Day Secondary Schools have fitted into the economy and life in general.

6.6 CONCLUDING REMARK

Hoy, *et al* (2000:10) say:

Quality in education is an evaluation of the process of educating which enhances the need to achieve and develop the talents of the customers of the process, and at the same time meets the accountability standards set by the clients who pay for the process or the outputs from the process of educating.

While it is true that Rural Day Secondary Schools have helped to improve access to secondary education by rural people, it is debatable if they have lived up to the expectation above. There is therefore a need to assess the quality of education continuously and undertake deliberate quality initiatives to ensure that Rural Day Secondary Schools provide satisfaction of agreed customer requirements (Huxtable 1995:9). Satisfaction of customer needs can only be realised if dropout rates and repetition rates are reduced, survival rates raised and pass rates improved. The quality of education in Rural Day Secondary Schools can be said to be high when the students stay

at school the full duration of the course, pass their examinations and are competitive enough to enter the job market. Hoy, *et al* (2000:2) say quality is what is good for the school and its students, and quote Edward Deming's statement, "A product or service possesses quality if it helps somebody and enjoys a good and sustainable market."

Rural Day Secondary Schools offer an opportunity for rural children to be educated, and participate in economic development. They have achieved a lot, but much more still needs to be done to bring the quality of education in these schools to ideal levels. The collective effort of all stakeholders towards quality holds the only hope for plausible processes and outcomes from Rural Day Secondary Schools.

REFERENCES

- ADEA 1998. *Zanzibar review and recommendations*. Paris: Commonwealth Secretariat.
- ADEA 2001. *Teacher resource centers: Base line study on cluster centres*. Paris: Commonwealth Secretariat.
- Barry TJ 1991. *Management for excellence through quality*. Wisconsin: ASQC Quality Process.
- Bell D; Mcbridge P & Wilson G 1994. *Managing quality*. Oxford: Butterworth-Heinemann.
- Best J W & Kahn J V 1993. *Research in education*. London: Allyn and Bacon.
- Bloch E and Bloch H 1998. *The link from schools to employment in education for employment in the 21st century*. Harare: The British Council.
- Bonstingl JJ On the road to quality: Turning stumbling blocks into stepping stones. *The School Administrator*, August 53:16-24.
- Books S 1996. *Rural poverty and education*. Montreal: American Educational Studies.
- Borg WR & Gall MD 1995. *Educational research*. New York: Longman.
- Borland KW 2001. Qualitative and quantitative research: A complementary balance. *New Directions for Institutional Research*, (112): 5 – 13.
- Bowora LC 2002. *Quality/Performance indicators/benchmarks*. Harare: Ministry of Education, Sport and Culture.
- Bray M, Clarke PB & Stephens D 1986. *Education and society in Africa*. London: Edward Arnold.
- BSP (Z) Matabeleland North Region 2001. *A cluster resource teacher's handbook on functional clusters*. BSP (Z) Matabeleland North: Bulawayo.
- Cheng SK 1997. *A-Level examination results: What can we make out of their correlation?* Singapore: NIECER Research 4 Bulletin.
- Chifunyise SJ 1998. *The role of government in the education service: Zimbabwean experiences in secondary education in recent year*. Harare: The British Council.
- Chifunyise SJ 1999. *The task of re-orienting to the demands of a new core business of a rationalised ministry*. Harare: Ministry of Education, Sport and Culture.
- Chigwedere A 2004. Government increases examination fees. Bulawayo: Chronicle.

- Christians CG 2003. *Ethics and politics of qualitative research*. London: Allyn and Bacon.
- Chronicle 1989. *Teachers live with ostriches*. Bulawayo: Chronicle reporter 16/01/89.
- Chronicle 2000. *Head squanders examination fees*. Bulawayo: Chronicle reporter 15/01/00.
- Chronicle 2001. *School head on the run*. Bulawayo: Chronicle reporter 05/10/01.
- Chronicle 2001. *Effects of drought hit schools*. Bulawayo: Chronicle reporter 15/11/01.
- Chronicle 2002. *Pupils used as farm labour*. Bulawayo: Chronicle reporter 23/05/02.
- Chronicle 2002. *Examination papers leaked*. Bulawayo: Chronicle reporter 15/11/02.
- Chronicle 2003. *“O” results out*. Bulawayo: Chronicle reporter 19/02/03.
- Chronicle 2003. *Msitheli boy gets 9 “A”s*. Bulawayo: Chronicle reporter 20/02/03.
- Chronicle 2003. *Rural schools get “A” level status*. Bulawayo: Chronicle reporter 02/03/03.
- Chung FC 1991. Policies for primary and secondary education in Zimbabwe: Alternative to the World Bank. *The Zimbabwe Journal of Educational Research*, 1992 (22 – 41).
- Cotton K 1997. *Applying total quality management principles to secondary education*. Portland: Northwest Regional Educational Laboratory.
- Creech B 1996. *The five pillars of TQM: How to make total quality management work for you*. New York: Truman Talley Books/Plume.
- Creswell J 1998. *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks: Sage.
- Danks S 1996. *Business studies*. New York: Letts Educational.
- Daugherty A 1996. Total quality education. *Contemporary Education*, Winter, 67(2):83-87.
- Davies B & Barnham W 1997. *Re-engineering and total quality in schools*. London: Pitman Publishing.
- Daymon C & Holloway I 2002. *Qualitative research in public relations and marketing communications*. London: Routledge.
- Deming WE 1986. *Out of the crisis*. Cambridge: Cambridge University Press.
- DFID 2001. *Vietnam education system*. <http://www.vietnamtourism.com/e-pages/business-eco/slk/Education/E/htm>.

- Dorsey BJ, Matshazi M & Nyagura L 1991. *A review of education and training in Zimbabwe*. Harare: CIDA & Zimbabwe government.
- Dowling P & Brown A 1998. *Doing research/reading research: A mode of interrogation for education*. London: The Falmer Press.
- Education Act 1966. Harare: Rhodesia Government
- Education Act 1979. Harare: Rhodesia-Zimbabwe Government
- Education Act 1987. Harare: Zimbabwe Government
- Education Act (Amendment) 1991. Harare: Zimbabwe Government.
- European Union Committee On Education General Assembly 2001 2000. *Indicators and benchmarks of school education*. [http://www.eiie.org/etnce/pd/7719 eng.PDF](http://www.eiie.org/etnce/pd/7719_eng.PDF).
- Frazier A 1997. *A roadmap for quality transformation in education*. Florida: St Lucie Press.
- Gatawa BSM 1998. *Quality – quantity dilemma in education: The Zimbabwe experience*. Harare: College Press.
- Gatiss GF 1996. *Total quality management*. New York: Cassel,
- Goddard D & Leask M 1992. *The search for quality: Management in education*. London: Paul Chapman.
- Graca da PD 2002. Cote d'Ivoire: Improving quality at the local level. *IIEP Newsletter*, 10(2): April – June 2002.
- Grauwe A 2001. *School supervision in four countries: volume 1*. UNESCO: IIEP.
- Greenwood M & Gaunt HJ 1994. *Total quality management for schools*. London: Cassel.
- Grisay A & Mahlck L 1991. *The quality of education in developing countries: A preview of some research studies and policy documents*. Paris: IIEP.
- Haralambos M & Holborn M 1995. *Sociology: Themes and perspectives*. London: Collins Educational.
- Hayward RPD 1999. Action research on total quality education in a South African primary school. Unpublished DEd hesis. Pretoria:UNISA
- Hayward RPD & Steyn GM 2001. The potential of total quality management: A case study of a primary school in South Africa. *South African Journal of Education*, 21(2): 103-109.
- Heneveld W 1994. *Planning and monitoring the quality of primary ducation in Sub-Saharan Africa*. Washington D.C: AFTHR Technical note No. 14, Human Resources and Poverty Division, Technical Department, Africa Region: World Bank.

- Hoy C, Bayne-Jardine C & Wood M 2000. *Improving quality in education* London: Falmer Press.
- Huxtable N 1995. *Small business total quality*. London: Chapman and Hall.
- IIEP 1989. *Internal efficiency of the education system*. Paris: IIEP.
- IIEP 2001. *School supervision in four countries: volume II: national diagnoses*. Paris: IIEP.
- Johnson G and Scholes K 1984. *Exploring corporate strategy*. London: Prentice Hall.
- Johnson B & Christensen L 2000. *Educational research: Quantitative, qualitative and mixed approaches*. London: Allyn and Bacon.
- Judd CM, Smit RE & Kidder LH 1991. *Research methods in social relations*. New York: Hacourt Jovanovich College.
- Kanji GK 1995. *Total quality management*. London: Chapman and Hall.
- Keller G, Warrack B & Bartel H 1994. *Statistics*. California: Duxbury Press.
- Leedy PD 1997. *Practical research: Planning and designing*. New York: McMillan.
- Levin HM and Lockheed C 1993. *Effective schools in developing countries*. London: The Falmer Press.
- Liston C 1999. *Managing quality and standards*. Buckingham: Open University Press.
- Lucey T 2002. *Quantitative techniques*. London: Continuum.
- Makhalisa J 1988. *Procedures for reporting by education officers in the regions*. Harare: Ministry of Education, Sport and Culture.
- Makhurane PM 1999. *Message from Zimbabwe School Examinations Council (ZIMSEC) Board Chairman*. Harare: ZIMSEC.
- Makhurane PM 2001. *Chairman's statement in ZIMSEC Annual Report 2001*. Harare: ZIMSEC.
- Maramba JC 2001. *Quest for quality assessment*. Harare: ZIMSEC.
- Marshall P 1998. *Research methods: How to design a successful project*. Oxford: How To Books.
- Maxwell JA 1996. *Qualitative research design: An interactive approach*. Thousand Oaks: Sage.
- Mbudzi M and Ndlovu S 2000. *Review of Better Schools Programme structures in the Ministry of Education, Sport and Culture*. Harare: Mand Startouts (Pvt) Ltd.

- McMahon WW 1993. *An efficiency based management system*. Paris: IIEP.
- McMillan JH & Schumacher S 1997. *Research in education: A conceptual introduction*. New York: Longman.
- Meadows KA 2003. So you want to do research? 1: An overview of the research process. *British Journal of Community Nursing*, 8(8): 369 – 375.
- Meadows K A 2003. So you want to do research? 2: Developing the research question. *British Journal of Community Nursing*, 8(9): 397 – 403.
- Mendenhall W & Beaver RJ 1991. *Introduction to probability and statistics*. Boston: PWS-Kent.
- Miller V 2001. *The new definitions of standards in American education*. Washington: The Heritage Foundation.
- Ministry of Education, Sport and Culture 1988. *Secretary for Education's annual report*. Harare: Ministry of Education, Sport and Culture.
- Ministry of Education, Sport and Culture 1993. *Better schools resource material for school Heads: Module 6: Monitoring school effectiveness*. London: Commonwealth Secretariat.
- Ministry of Education, Sport and Culture 1994. *CEO circular number 1 of 1994*. Harare: Ministry of Education, Sport and Culture.
- Ministry of Education, Sport and Culture 1994. *CEO circular number 9 of 1994*. Harare: Ministry of Education, Sport and Culture.
- Ministry of Education, Sport and Culture 1995. *Education statistics bulletin vol. 2 of 1995*. Harare: Ministry of Education, Sport and Culture.
- Ministry of Education, Sport and Culture 1995. *The Better Schools Programme Zimbabwe: Module A*. Harare: Ministry of Education, Sport and Culture.
- Ministry of Education, Sport and Culture 1996. *Standards control unit and professional administration mission statement*. Harare: Ministry of Education.
- Ministry of Education, Sport and Culture 1999. *Secretary for Education's annual report*. Harare: Ministry of Education, Sport and Culture.
- Ministry of Education, Sport and Culture 2000. *The Better Schools Programme Zimbabwe Module B*. Harare: Ministry of Education, Sport and Culture,

- Ministry of Education, Sport and Culture 2001. *The Better Schools Programme: A manual on resource centers: Module C*. Harare: Ministry of Education, Sport and Culture.
- Moore DS 1991. *Statistics: Concepts and controversies*. New York: WH Freeman and Company.
- Morehouse DL 1996. *Essentials of TQM*. England: Gower.
- Morgan C & Murgatroyd S 1994. *Total quality management in the public sector*. Buckingham: Open University Press.
- Moyo G and Mubengegwi S 1995. *Educational planning and development: Module EA3DC104*. Harare: ZOU.
- Mpofu IN 1986. *Procedures for reporting by education officers in the regions*. Harare Ministry of Education, Sport and Culture.
- Mugabe RG 1983. *Pamberi ne education*. Harare: ZIMFEP.
- Murira CB 2001. *Examination administration in ZIMSEC: 2001*. Harare: ZIMSEC.
- Mutumbuka D 1982. *Education in Zimbabwe: Past present and future*. Harare ZIMFEP.
- Natarajan S 1993. *Introduction to economics of education*. New Dehli: Sterling.
- Ncube NJ 1993. Financial management in Rural District Council schools. Unpublished MED thesis. Harare: University of Zimbabwe.
- Nitko A J 1996. *Educational assessment of students*. New Jersey: Merrill.
- Northwest Regional Educational Laboratory 2000. *Applying total quality management to secondary education*. <http://www.nwrel.org/scpd/sirs/9/s035.html>.
- Nyagura LM 1991. A comparative analysis of student achievement by school type in Zimbabwe secondary schools. *Zimbabwe Journal of Educational Research*, 1992 (42 – 61).
- Nziramasanga C 1999. *Presidential commission of inquiry into education and training*. Harare: Government of Zimbabwe.
- Oakland JS 1995. *Total quality management*. Boston: Butterworth-Heinemann.
- Office of the President and Cabinet 1999. *Ministry of Education, Sport and Culture: Client's Charter*. Harare: Government of Zimbabwe.
- Oppenheim AN 1996. *Questionnaire design, interviewing and attitude measurement*. London: Printer Publishers

- Peano S 2002. Education finance and management. *IIEP Newsletter*, 10(1) January – March 2002.
- Poggenpoel M, Myburgh C & Linde CH 2001. Qualitative research strategies as prerequisite for quantitative strategies. *Education*, 22(2): 408 – 413.
- Public Service Bulletin vol.2 1998. Harare: Public Service Commission.
- Quality Assurance Agency 2002. *The nature of academic quality assurance and its national context*. United Kingdom: Essex University.
- Quist D & Kaluba H 2001. *Teacher resource centres: Baseline study report*. London: Commonwealth Secretariat.
- Quong T & Walker A 1996. TQM and school restructuring: a case study. *School Organisation*, June, 16(2) 219-231.
- Robson C 1995. *Real world research: A resource for social scientists and practitioner researchers*. Oxford: Blackwell.
- Ross KN & Mahlick L 1990. *Planning the quality of education: The collection and use of data for informed decision-making* Paris: IIEP.
- Ross KN 2002. Quality or quantity? Or both? *IIEP Newsletter*, 10(2): April – June 2002.
- Ross KN 2002. Monitoring the quality of education. *IIEP Newsletter*, 10(1): January – March 2002.
- Ruskin T 1997. *School improvement series*. Northwest Regional Educational Laboratory: <http://www.nwrel.org/scpd/sirs/9/So35.html>
- Sallis E 1996. *Total quality management in education*. London: Kogan Page.
- Shipengrover JA & Conway JA 1996. *Expecting excellence: Creating order out of chaos in a school district*. California: Corwin Press.
- Sibanda IM 1999. *ZIMSEC annual report*. Harare: ZIMSEC.
- Sibanda IM 2001. *From The director's desk in annual report*. Harare: ZIMSEC.
- Smit PJ & Cronje de J 1997 *Management principles*. Cape Town: Juta & Co.
- Standard 2003. *Education standards fall*. Harare: Standard reporter 17/08/03
- Statutory instrument 87 of 1992. Harare: Government of Zimbabwe.
- Statutory instrument 70 of 1993. Harare: Government of Zimbabwe.
- Stephenson S 2002. *Quality assurance*. Republic of South Africa: Rhodes University.
- Steyn GM 1999. The implementation of total quality management principles in an American School. *Periodical for Primary Education*, 15: 18-39.

- Steyn GM 2001a. Focusing on guiding principles of quality to redesign educational institutions. *South African Journal of Education*, 21(1): 17-24.
- Steyn GM 2001b. *Perceptions of quality in an American school district and some questions it raises for South Africa*. *South African Journal for Education*, 21 (2): 114-120.
- Strickland T 1999. *Strategic management concepts and cases*. New York: McGraw Hill.
- Sunday News 2003. *Education review*. Harare: Sunday News reporter 8/02/03
- Thabethe J 2003. *Examinations circular No.15 of 2003*. Harare: ZIMSEC.
- Thompson Jr AA & Strickland AJ 1992. *Strategy formulation and implementation* Boston: Irwin.
- Tuckman BW 1994. *Conducting educational research*. New York: Harcourt Brace College.
- UNESCO 2002. *African girl's education initiative*. Paris: UNESCO.
- UNICEF 2002. *A review of evaluations of UNICEF education activities (1994-2000)*. Paris: UNICEF
- Vulliamy G, Lewin K & Stephens D 1995. *Doing educational research in developing countries*. London: The Falmer Press.
- Wardsworth HM; Stephens KS & Godfrey AB 2002. *Modern methods for quality control and improvement*. New York: John Wiley and Sons.
- Wegner T 2000. *Applied business statistics: Methods and applications*. Kenywn: Juta & Co.
- Weller LD 1995. School restructuring and downsizing: Using TQM to promote cost effectiveness. *TQM Magazine*, 7(6): 11-16.
- West-Burnham J 1992. *Managing quality in schools*. London: Longman.
- Whitaker P 1998. *Managing change in schools*. Buckingham: Open University Press.
- World Bank 1990. *Implementing educational policies in Zimbabwe*. Washington, D.C: The World Bank.
- World Bank 1992. *Development of education, 1988-1992: national report of Zimbabwe*. Harare: Ministry of Education, Sport and Culture.
- Yin CC 1996. *School effectiveness and school-based management* London: Falmer Press.
- ZANU(PF) 1980. *Election manifesto*: Harare: Jongwe.
- ZIMSEC Act 1994. Government of Zimbabwe.

- ZIMSEC 1999. *Annual report 1999*. Harare: ZIMSEC.
- ZIMSEC 2001. *Annual report 2001*. Harare: ZIMSEC.
- ZIMSEC 2003. *Localisation awareness*. Harare: ZIMSEC.
- ZIMSEC 2003. *Frequently asked questions*. Harare: ZIMSEC.
- ZIMSEC 2003. *Examination circular number 15 of 2003*. Harare: ZIMSEC.
- Zvobgo RJ 1986. *Transforming education*. Harare: College Press.

Appendix A: Schedule for capturing data on internal efficiency

1. Enrolment by year, form, sex and age of students

Year	Form	Age in years →	Below 13	13	14	15	16	17	18	Above 18	Total
1999	1	Male									
		Female									
	2	Male									
		Female									
	3	Male									
		Female									
	4	Male									
		Female									
	Total										
2000	1	Male									
		Female									
	2	Male									
		Female									
	3	Male									
		Female									
	4	Male									
		Female									
	Total										
2001	1	Male									
		Female									
	2	Male									
		Female									
	3	Male									
		Female									
	4	Male									
		Female									
	Total										
2002	1	Male									
		Female									
	2	Male									
		Female									
	3	Male									
		Female									
	4	Male									
		Female									
	Total										
2003	1	Male									
		Female									
	2	Male									
		Female									
	3	Male									
		Female									
	4	Male									
		Female									
	Total										
Grand Total											

2. Repeaters by year, form and sex of students

Year		1	2	3	4	Total
1999	Male					
	Female					
2000	Male					
	Female					
2001	Male					
	Female					
2002	Male					
	Female					
2003	Male					
	Female					
Total						

3. Dropouts by year, reason, form and sex of students

Year	Form	A		C		D		E		F		G		Total
		M	F	M	F	M	F	M	F	M	F	M	F	
1999	1													
	2													
	3													
	4													
	Total													
2000	1													
	2													
	3													
	4													
	Total													
2001	1													
	2													
	3													
	4													
	Total													
2002	1													
	2													
	3													
	4													
	Total													
2003	1													
	2													
	3													
	4													
	Total													
Grand Total														

Key: A-School fees
E-Illness

B-Expulsion
F-Death

C-Pregnancy
G-Unexplained

D-Marriage

4. 'O' Level examination pass rates by year, and sex of the students

Year		Total number of candidates who wrote the examination	Number of candidates who passed 5 or more subjects including English language
1999	Male		
	Female		
2000	Male		
	Female		
2001	Male		
	Female		
2002	Male		
	Female		
2003	Male		
	Female		

Appendix B: Interview guide for focus groups (school managers)

1. What are your views on the Better Schools Programme?
2. What has been the impact of the Zimbabwe School Examinations Council on the quality of education of Rural Day Secondary Schools?
3. How has the introduction of the Clients Charter affected the quality of education of Rural Day Secondary Schools?
4. How do you view the impact of the Quality Assurance Division on the quality of education of Rural Day Secondary Schools?
5. How have School Development Committees impacted on the quality of education of Rural Day secondary Schools?
6. How can each of the programmes (BSPZ; ZIMSEC; the Clients Charter; the Quality Assurance Division, and School Development Committees) be made more effective in enhancing the quality of education of Rural Day Secondary Schools, given that there is always room for improvement?

Appendix C: Interview guide for personal interviews with school heads

1. What factors do you think promote the quality of education of Rural Day Secondary Schools?
2. What do you consider to be the barriers to the quality of education in Rural Day Secondary Schools?
3. What can be done to improve the quality of education in general in Rural Day Secondary Schools?
4. How can dropout rates be reduced in Rural Day Secondary Schools?
5. How can repetition rates be reduced in Rural Day Secondary Schools?
6. How can “O” level pass rates be improved in Rural Day Secondary Schools?

Appendix D: Data on enrolments, repetition, dropouts and pass rates

1. Enrolment by form, sex and age

Year	Form	Age in years →	Below 13	13	14	15	16	17	18	Above 18	Total
1999	1	Male	90	772	1501	1092	490	138	34	5	4122
		Female	196	1212	1623	894	279	86	21	1	4312
	2	Male		119	708	1310	908	355	89	18	3507
		Female	3	222	1026	1508	679	234	60	6	3738
	3	Male		7	94	613	1038	677	301	95	2825
		Female		1	181	882	1248	584	179	35	3110
	4	Male			11	83	524	870	469	269	2226
		Female			6	183	728	962	436	199	2514
	Total		289	2333	5150	6565	5894	3906	1589	628	26354
2000	1	Male	91	992	1524	1147	524	154	30	9	4471
		Female	131	1240	1690	847	308	46	7	2	4271
	2	Male		85	685	1267	931	364	91	14	3437
		Female		115	1057	1623	848	246	43	12	3944
	3	Male			94	692	1238	780	338	95	3237
		Female		1	150	881	1228	640	212	68	3180
	4	Male				58	512	989	577	351	2487
		Female			1	98	842	1209	479	206	2835
	Total		222	2433	5201	6613	6431	4428	1777	757	27862
2001	1	Male	79	995	1542	1201	624	174	27	7	4649
		Female	101	1104	1722	941	411	59	8	0	4346
	2	Male		82	761	1329	763	347	112	16	3410
		Female	4	123	1120	1381	682	284	58	17	3669
	3	Male			76	673	1023	748	312	80	2912
		Female		27	93	965	1300	616	221	27	3249
	4	Male				61	615	1033	598	307	2614
		Female			1	83	862	1040	458	195	2639
	Total		184	2331	5315	6634	6280	4301	1794	649	27488
2002	1	Male	83	869	1698	1302	603	185	43	9	4792
		Female		1204	1756	924	347	61	23	2	4317
	2	Male		71	903	1419	949	411	115	20	3888
		Female		96	930	1521	860	291	36	5	3739
	3	Male			76	657	935	682	334	75	2759
		Female		2	110	933	1102	653	207	36	3043
	4	Male				55	594	975	607	279	2510
		Female				72	814	1102	507	199	2694
	Total		83	2242	5473	6883	6204	4360	1872	625	27742
2003	1	Male	82	971	1526	1221	589	127	31	7	4554
		Female	112	983	1684	869	393	58	29	1	4129
	2	Male		78	822	1438	787	471	107	35	3738
		Female		97	878	1558	1243	189	38	16	4019
	3	Male			64	858	1182	769	284	89	3246
		Female			81	610	1123	571	213	19	2617
	4	Male				56	491	877	591	241	2256
		Female				94	609	1094	472	219	2488
	Total		194	2129	5055	6704	6417	4156	1765	627	27047
Grand Total			972	11468	26194	33399	31226	21151	8797	3286	136493

2.Repeaters by form and sex

Year		1	2	3	4	Total
1999	Male	15	2	16	123	156
	Female	5	11	21	137	174
2000	Male	25	30	89	139	283
	Female	15	16	164	148	343
2001	Male	16	27	96	120	259
	Female	12	20	91	125	248
2002	Male	18	23	54	154	249
	Female	13	19	75	180	287
2003	Male	9	21	80	145	255
	Female	17	24	76	156	273
Total		145	193	762	1427	2527

3.Dropouts by form, reason and sex

		A		C		D		E		F		G		Total
Year	Form	M	F	M	F	M	F	M	F	M	F	M	F	
1999	1	63	49									4	5	121
	2	79	71									3	12	165
	3	85	94									7	4	190
	4	89	74									8	11	182
	Total	316	288									22	32	658
2000	1	68	86		2		1					11	1	169
	2	83	102		3							5	9	202
	3	113	100		20							21	22	276
	4	116	88		24		4					20	15	267
	Total	380	376		49		5					57	47	914
2001	1	71	82									6	9	168
	2	96	104		3							38	25	266
	3	75	63		12		1					32	47	230
	4	80	81		20							21	22	224
	Total	322	330		35		1					97	103	888
2002	1	86	70									4	11	171
	2	121	136		3							9	13	282
	3	88	107		21		5				3	19	23	266
	4	88	112		26		6					34	22	288
	Total	383	425		50		11				3	66	69	1007
2003	1	90	81		1							19	7	198
	2	100	103		15		1					24	22	265
	3	111	116		23		3					21	17	291
	4	59	45		24		1					33	19	181
	Total	360	345		63		5					97	65	935
Grand Total		1761	1764		197		22				3	339	316	440

Key: A-School fees
E-Illness

B-Expulsion
F-Death

C-Pregnancy
G-Unexplained

D-Marriage

4. 'O' Level examination pass rates by year, and sex of the students

Year		Total number of candidates who wrote the examination	Number of candidates who passed 5 or more subjects including English Language
1999	Male	1 779	266
	Female	1 727	257
2000	Male	2 119	217
	Female	2 438	164
2001	Male	2 362	236
	Female	2 215	163
2002	Male	1 965	225
	Female	2 094	166
2003	Male	2 144	177
	Female	2 309	153